



State Plan for Electric Vehicle Infrastructure Deployment



Rhode Island Electric Vehicle Infrastructure Deployment State Plan

Submitted to: U.S. Joint Office of Energy and Transportation

Document no: 04

Project manager: Daniel Herstine, Jacobs

Revision no: 04

Prepared by: Catherine Burns, Jacobs

Date: 07/29/2022

File name: Rhode Island Electric Vehicle Infrastructure Deployment State Plan

Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved
00	07/12/22	First draft review	C. Burns	A. Lahav	M. Sluder	D. Herstine
01	07/15/22	OER and DEM comments	C. Burns	A. Lahav	M. Sluder	D. Herstine
02	07/20/22	Updates based on Communications comments	C. Burns	A. Lahav	M. Sluder	D. Herstine
03	07/22/22	Distribute draft to the public	C. Burns	A. Lahav	M. Sluder	D. Herstine
04	07/29/22	Submit Final Plan	C. Burns	A. Lahav	M. Sluder	D. Herstine

Distribution of copies

Revision	Issue approved	Date issued	Issued to	Comments
00	00	07/12/22	Internal team	Internal working team to edit and update
01	01	07/15/22	Core team	Updates based on DEM and OER comments and stakeholder feedback
02	02	07/20/22	Core team	Additional comments from Communications
03	03	07/22/22	Public	For public review and comments
04	04	07/29/22	U.S. Joint Office of Energy and Transportation	U.S. Joint Office of Energy and Transportation

Executive Summary

As part of the Infrastructure Investment and Jobs Act (IIJA), and after approval of this State Plan for Electric Vehicle Infrastructure Deployment (“Plan”) by the Secretary of Transportation, the Rhode Island Department of Transportation (RIDOT) will be receiving \$3.8 million in fiscal year 2022, and \$22.9 million over the next 5 years under the U.S. Department of Transportation (USDOT) Federal Highway Administration (FHWA) National Electric Vehicle Infrastructure (NEVI) Formula Program to establish an interconnected network to facilitate data collection, access, and reliability. RIDOT partnered with the Rhode Island Office of Energy Resources (OER) and the Rhode Island Department of Environmental Management (DEM) to develop this Plan and an electric vehicle (EV) charging station network. Existing charging stations have been deployed across the state over the past 10 years. About 300 publicly accessible charging stations in the state are operated by different public and private entities.¹ As of July 1, 2022, there are almost 6,000 EVs in Rhode Island.² The Program will be used not only to build out main corridors but also to help coordinate the use of all direct current fast charger (fast charging stations, DCFC) stations, workforce development, and plan maintenance and upgrades. The State of Rhode Island has one designated Alternative Fuel Corridor (AFC), Interstate 95, that is prioritized for investment. Site ID 167864 off Interstate 95, Exit 24 is a Walmart DCFC station in Providence operated by Electrify America. Less than a mile from Interstate 95, this privately owned site satisfies the federal requirements.³ After the Secretary of Transportation certifies the corridor build-out, RIDOT can prioritize the funding strategically to fill gaps in the market, support our transportation network, develop the local workforce, and serve the most Rhode Islanders possible while balancing the impact on the grid, coastal areas, and rural access. RIDOT will use the funds to create value for the public, to decrease driver anxiety regarding fast EV charging station availability, and as a proof of concept to help local businesses enter the market with fast EV charging stations and amenities. RIDOT has developed the following approach to infrastructure deployment.

1. RIDOT plans to use its resources to **increase fast EV charging station awareness and reliability** of existing fast charger charging stations. Based on feedback, the existing fast station reliability and uptime have been consumer issues. RIDOT will work with the private sector to help improve and promote all DCFC infrastructure sites. Public survey results indicated that the existing network needs to be promoted on smartphone apps, signage, websites, advertisements, and targeted areas. Maintenance can be supported using the NEVI funding to meet NEVI requirements, particularly reliability standards (24/7 service, 97 percent reliability, Americans with Disabilities Act [ADA] accessibility, and so on).

2. To serve Rhode Islanders, we must **provide access to fast EV charging stations in the Providence metropolitan area**. The public is car-centric, and although RIDOT has successfully provided Park ‘n Ride facilities to facilitate shared transport, none exist on the northern portion of Interstate 95, where most of Rhode Island’s population and almost all of our Justice40 communities are located. Ideally, RIDOT would have access to large areas around Providence to help build new dedicated fast EV charging stations, but the impacts, cost, and grid constraints will create issues in the near term. Listening to stakeholder feedback that local businesses and convenience stores are eager to install fast charging stations and provide amenities, we will use the funds to work with interested local parties and private partners to provide fast, low-cost charging at locations within a mile of Interstate 95, Interstate 195, and Interstate 295. This will help offset low use at first, increase grid capacity, encourage private participation, and critically address uptime reliability requirements, particularly with local businesses and parties. It also allows for resources to be allocated on the eastern side of the state in Bristol County, creating increased access. The funds’ benefit is expanded by leveraging public-private partnerships, creating opportunities for near-term metropolitan and statewide deployment. RIDOT will structure contracts to require its partners to meet the federal fast charging station requirements for reliability, security, and access while prioritizing the participation requirement for disadvantaged business enterprises.

3. In the Providence metropolitan area, Route 146, a major corridor connecting local and through travelers, is currently undergoing rehabilitation. RIDOT will **work with Planning on EVSE near Route 146** and stakeholders to promote the integration of EV charging access along the route during the planning of the rehabilitation. Planning will work with stakeholders and coordination to include EVSE in large capital investment projects moving forward. We will explore EVSE along the Route 146 corridor to build out EV charging, including electrical infrastructure, to NEVI standards. There are also several businesses and potentially interested parties that RIDOT could partner with to provide EVSE along this route.

4. We plan to **upgrade existing Park ‘n Ride facilities** along Interstate 95 that RIDOT owns, providing amplified benefits to encourage drivers to use shared transport in Rhode Island, a historical priority for RIDOT. The Ashaway Park ‘n Ride facility along the Interstate 95 corridor in Hopkinton is near the Connecticut border. Connecticut does not have an existing fast charging station near this border or near-term plans to install one. RIDOT will prioritize the Ashaway location as important to increasing access by creating national interstate connectivity. The site will require upgrading the current two DCFCs to four DCFCs. This is also in a rural area and will also support tourist travel into the state. Another priority is updating the Route 117 Park ‘n Ride facility in Warwick, where there are two DCFCs and three Level 2 chargers. By reducing the time needed to

¹ <https://afdc.energy.gov/stations/#/analyze?region=US-RI&fuel=ELEC>

² <https://ridemgis.maps.arcgis.com/apps/webappviewer/index.html?id=f164da525c77463b98cf55b72950beb7>

³ This site is nonproprietary, less than a mile from the highway, allows for open-access payment methods, is publicly available, and includes four direct current fast chargers (DCFCs), at least one of which is a 350-kilowatt (kW) charger.

complete these fast charging stations with upgrades to the existing DCFCs instead of building out new DCFC stations. RIDOT will provide more immediate public benefit to our most-traveled corridor, serving local, through, and tourism travelers. RIDOT will meet its goal in the next 5 years by fully building out Interstate 95 with two additional DCFCs at each location, meeting the NEVI requirements, including providing 97 percent reliability.

5. Data collection and sharing, particularly among the transportation, energy, and environmental agencies, provides feedback paramount to reacting to public needs, improving customer and fast charging station host satisfaction, and promoting equitable and efficient investments. All data collected and reported must be available to the public in an easily digestible format. The data from NEVI and public usage must be made available to **use data to inform future policy and program decisions**. RIDOT will work with stakeholders, including the U.S. Joint Office of Energy and Transportation, to ensure that our contracts require a suitable data management plan that satisfies the NEVI requirements and specifications.

6. RIDOT will spend the U.S. Department of Transportation (USDOT) apportionment of Highway Infrastructure Program funds with a responsible, practical approach, fostering local electric vehicle supply equipment (EVSE) workforce development for the operations, maintenance, and markets emerging from this new technology. Several universities, community colleges, and technical groups are feeding into the local market. Our contracts will foster competitive grants to increase local participation, especially for disadvantaged business enterprises. We have included outreach efforts to ensure resources are spent to grow, build upon, and **help employ the Rhode Island workforce**. We will also follow all Buy America requirements when procuring fast charging stations and infrastructure components.

7. Support EVSE Coastal Development and Contingency Reserve. The market is moving; we are not the only state performing installation activity. Although our estimates were conservative, inflation is at an all-time high and we want this Plan to address the areas that need access immediately. However, we hope that the money will go further. We expect the installation, construction and maintenance costs to go down and requirements to shift. Our stated goals allow us to pivot and potentially expand our grant program to coastal areas. For example, if we have appropriate station density along a corridor, and allow for charging on both sides of Providence, we can move south quickly. In particular, Aquidneck Island is a current gap with a need to reduce using bridges or making long trips for fast charging. Tesla plans to install at a Target with public access, which we are focused on for coastal development. And based on the initial results of the survey, serving the coast is a common public priority.

This approach considers the current and projected needs of Rhode Islanders, federal guidance, and stakeholder feedback. We urge the public and our private entities to read and provide feedback on this Plan, particularly concerning areas along or near our major corridors and methods to develop the local workforce. We ask the U.S. Joint Office of Energy and Transportation to approve our Plan to allow for immediate efforts to improve access for EVs in the Ocean State. We are excited that this is the beginning of a long-term commitment by RIDOT to provide a better EV charging experience for the public. We will have more opportunities for public feedback and assess the program based on feedback, data collection, and reporting. The report will be updated annually, and we are open to incorporating future feedback to reflect the public interest.

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List of Acronyms and Abbreviations

$\mu\text{g}/\text{m}^3$	microgram(s) per cubic meter
ADA	Americans with Disabilities Act
AFC	alternative fuel corridor
BEV	battery-electric vehicle
CMAQ	Congestion Mitigation and Air Quality Improvement
CMP	Congestion Management Process
DAC	disadvantaged community
DCFC	direct current fast charger
DEM	Department of Environmental Management
DOA	Department of Administration
DOE	U.S. Department of Energy
EC4	Executive Climate Change Coordinating Council
EPA	U.S. Environmental Protection Agency
EV	electric vehicle
EVSE	electric vehicle supply equipment
FCEV	fuel cell electric vehicle
FHWA	Federal Highway Administration
FY	fiscal year
IIJA	Infrastructure Investment and Jobs Act
kg/day	kilogram(s) per day
kW	kilowatt(s)
MoU	<i>Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding</i>
NECSEMA	New England Convenience Store and Energy Marketers Association
NESCAUM	Northeast States for Coordinated Air Use Management
NEVI	National Electric Vehicle Infrastructure
OCP	Open Charge Point Protocol
OER	Office of Energy Resources
PHEV	plug-in hybrid electric vehicle
PZEVF	Partners for a Zero Emission Vehicle Future
RIAC	Rhode Island Airport Corporation
RIDOT	Rhode Island Department of Transportation
RIPTA	Rhode Island Public Transit Authority
USDOT	U.S. Department of Transportation
ZEV	zero-emission vehicle

1. Introduction

Rhode Island Department of Transportation (RIDOT) is excited to present this Rhode Island State Plan for Electric Vehicle Infrastructure Deployment (“the Plan,” “Rhode Island EVSE Plan”) for strategies to help build out the state’s electric vehicle (EV) charging infrastructure. Although it is the smallest state in the nation, Rhode Island has over a million residents. The Providence metropolitan area, the Interstate 95 corridor, connects Connecticut and the tri-state area to Massachusetts, serving as the gateway to New England for commuters, seasonal travelers, and freight traffic.

RIDOT partnered with the Rhode Island Office of Energy Resources (OER) and the Rhode Island Department of Environmental Management (DEM) to help plan and strategize the build-out of a fast EV charging station network. As part of the Infrastructure Investment and Jobs Act (IIJA), RIDOT plans to use \$3.38 million this year to build out the state’s electric vehicle supply equipment (EVSE) charging infrastructure, prioritizing Rhode Island’s designated Alternative Fuel Corridor (AFC) along the Interstate Highway System. The U.S. Department of Transportation (USDOT) apportionment of Highway Infrastructure Program funds for the National Electric Vehicle Infrastructure (NEVI) Program provides Rhode Island with \$22.9 million over 5 years.

The Plan follows the Federal Highway Administration (FHWA) format provided at www.driveelectric.gov by the U.S. Joint Office of Energy and Transportation. In addition to the U.S. Joint Office of Energy and Transportation guidance, our overarching strategy for EV charging infrastructure is to use the federal funds to provide the most benefit for the public and to create a sustainable, efficient, and equitable transportation system network. Our state is uniquely dense, with short-run segments supporting local, regional, tourism, and freight traffic. Over the past decade, Rhode Island has collaborated in regional strategies for deploying EVSE to support the emerging EV ecosystem. Various approaches, incentive programs, and funding streams have supported infrastructure investments to continue developing the EV market.⁴ In developing this EVSE Plan, we have invested in exploring and promoting incentives, performing outreach, and improving reliability. Data collection and sharing are paramount to optimizing investments and information among agencies to react to public needs. The foundational data sets include publicly available data that capture vulnerable populations, health, transportation access and burden, energy burden, fossil fuel dependence, resilience, and environmental and climate hazards, consistent with Justice40.

Before receiving notice of funding from the IIJA, RIDOT had already implemented an EV charging station pilot program in fall 2020. In conjunction with the OER and Rhode Island Energy, formerly National Grid, free EV charging stations were built at two Park ‘n Ride lots immediately off Interstate 95.⁵ One is in central Rhode Island on Route 117 (Centerville Road) at Exit 10 in Warwick, and the other is on Route 3 (Main Street) at Exit 1 in Hopkinton, close to the Connecticut border. Both feature 240-volt Level 2 charger and direct current fast charger (DCFC) stations. The Level 2 chargers can provide 25 miles of range per hour of charging, whereas the DCFCs can provide approximately 250 miles in an hour. Charging times can vary slightly based on the vehicle model. Each Park ‘n Ride lot can accommodate up to six cars using the Level 2 chargers and two cars using the DCFCs.

1.1 Dates of State Plan for Electric Vehicle Infrastructure Deployment Development and Adoption

The Rhode Island EVSE Plan has been a collaborative effort, building on over a decade of innovation, research, outreach, planning, policy implementation, and investment in our clean transportation system. As part of the development process, RIDOT has coordinated and hosted stakeholder engagement sessions to discuss the state agency’s role in the federal funding rollout. This Plan, developed in July 2022, is intended to outline a near-term strategy for EVSE deployment of the NEVI funds, focused on building out existing infrastructure along Interstate 95. This Plan also outlines strategies for deployments and spending in future years. In 2022, RIDOT created a schedule of milestones (Figures 1 and 2):

Step 1: Identify the EVSE Needs for Rhode Island	April to June 2022
Step 2: Program Funding and Eligibility	May to July 2022
Step 3: Collaboration and Stakeholder Engagement	May to Aug. 2022
Workshop 1: Stakeholder Working Group	June 9, 1:30 PM
Workshop 2: Public Session A	June 22, 10:30 AM
Workshop 3: Public Session B	June 22, 1:30 PM
Workshop 4: Public Session C	June 23, 3:00 PM
Workshop 5: Public & Stakeholder Electric Vehicle Infrastructure Deployment Plan Review Session	July 14, 11:00 AM

⁴ Investments include, but are not limited to private, federal, state, utility, one-time settlement dollars, and local private-public partnerships.

⁵ Funding was provided by the OER Electrify RI program. Funds for Electrify RI came from the Volkswagen Diesel Settlement Environmental Mitigation Trust and were invested according to the state’s Beneficiary Mitigation Plan. The utility provided additional funding to cover installation costs.

- Step 4: RIDOT EVSE Plan Submittal July 21, 2022
- Step 5: Anticipated Federal Approval and Award Oct. 2022

While on a limited schedule, RIDOT engaged with the public early and hosted stakeholder engagement sessions to explain the federal funding, NEVI requirements, current EV charging stations, and priorities. The stakeholder engagement sessions successfully hosted over 60 participants from various industries and asked questions about future maintenance and operation. After the first workshop, RIDOT received critical feedback from a user at an EV DCFC station along Interstate 95 who experienced payment and operating errors. This is important because our public has issues with the existing stations, which impacts their anxiety about relying on EVSE. We followed up and increased our awareness of shared experience and perception. The Green Energy Consumers Alliance also offered feedback that RIDOT includes specific questions in stakeholder engagement to facilitate more participation. RIDOT thanks the public and stakeholders for all feedback provided to date. All feedback was insightful to the design of this EVSE Plan.

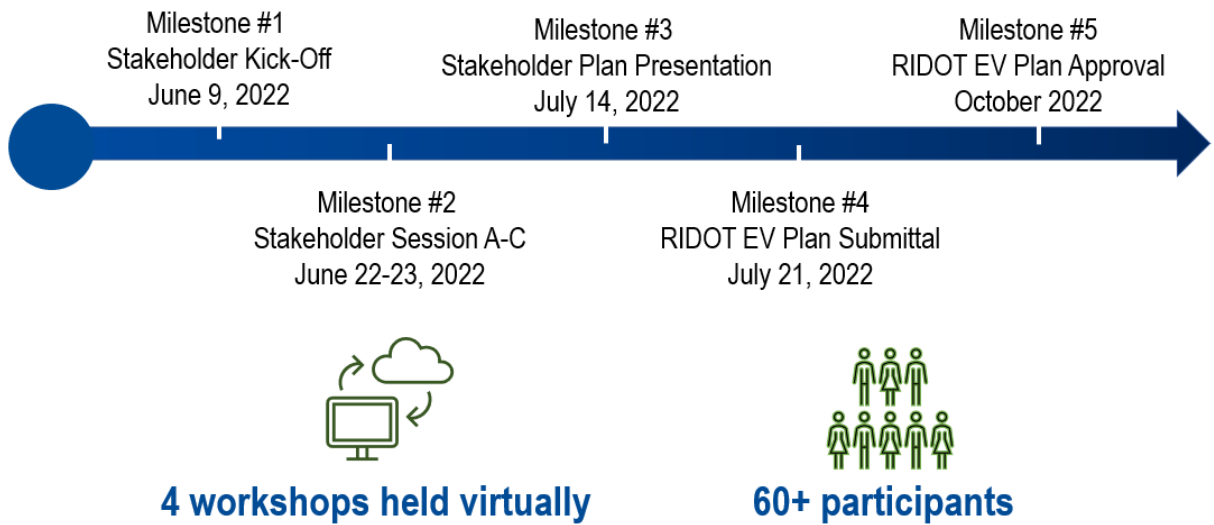


Figure 1: RIDOT EVSE Plan Milestones

For Milestone 5 and beyond for the implementation and annual updates, RIDOT’s intended role is to facilitate NEVI Formula Program funding spending. This is the beginning of a long-term commitment by RIDOT to provide a better EV charging experience for the public. We will have more opportunities for public feedback.

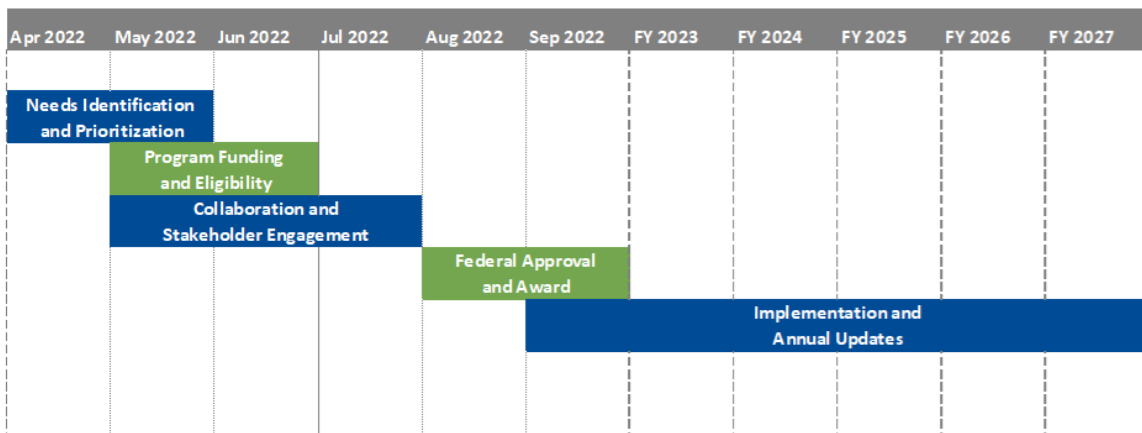


Figure 2: Long-term RIDOT EVSE Schedule

2. State Agency Coordination

RIDOT is highly engaged with other state and local agencies working collaboratively to develop this Plan. To incorporate the extensive EVSE efforts and knowledge in Rhode Island, RIDOT established a working group. Within this group, there are two participant categories:

1. Core team members who contributed to and reviewed the Plan
2. Technical advisory committee members who are advisers to the Plan (further defined in Section 3.1)

The NEVI Core Team includes the following agencies:

- Rhode Island Department of Transportation (RIDOT)
- Rhode Island Office of Energy Resources (OER)
- Rhode Island Department of Environmental Management (DEM)

The NEVI Core Team provides direct feedback in developing this Plan, including other interagency and public engagement efforts. This group started to meet biweekly in May 2022 and plans to continue to meet regularly to support this Plan and NEVI development into 2027. The core team will also consult with the State's Executive Climate Change Coordinating Council (EC4) for discussion and feedback on EVSE plans moving forward.

RIDOT's core technical group met with the Connecticut Department of Transportation on May 18, 2022. The purpose of the meeting was to introduce the state teams, share work done to date and lessons learned, and discuss practical next steps. Interstate 95 was of prime importance because it is the only designated AFC in Rhode Island and is shared between the two states. Following the meeting, RIDOT met with the Connecticut Department of Transportation and the Massachusetts Department of Transportation on June 8, 2022. The three neighboring states discussed their immediate plans, stakeholder outreach, and ongoing initiatives to improve the public's future-proof systems and improve reliability. We plan to continue meeting to discuss plan progress, lessons learned, and the best way to serve the regional needs of the public.

3. Public Engagement

Providing effective communication channels for questions, concerns, and suggestions and obtaining stakeholder input is vital in building and supporting an effective EV network. RIDOT plans to broaden its current stakeholder distribution list to include ongoing stakeholder outreach with the general public; governmental entities; federally recognized Tribes; labor organizations; private sector and industry representatives; representatives of the transportation and freight logistics industries; state public transportation agencies; and urban, rural, and underserved or disadvantaged communities. The focus is to ensure that the deployment, installation, operation, and use of EV charging infrastructure achieve equitable and fair benefits.

Stakeholder and public feedback is welcome throughout this Plan development and in the future. The RIDOT EV Charging Stations webpage, <https://www.dot.ri.gov/projects/EVCharging/index.php>, includes a form for active feedback. All material has been posted to the landing page. Based on these meetings, the RIDOT core team has connected with public members to solicit immediate feedback. We are committed to working with the public to help connect resources and near-term opportunities. For example, RIDOT has had conversations with landowners such as Anchor Subaru and Cardi's Furniture to install publicly available chargers that meet the NEVI requirements. At Anchor Subaru, the owner is also an EV driver committed to providing a safe, well-lit, 24-hour-access, fast charging station with restrooms. The owner of Cardi's Furniture Warwick facility (1681 Quaker Lane) is interested in working with RIDOT to provide public charging. Cardi's Furniture's current plans include installing new publicly available chargers with 24-hour access, restroom, lights, and Wi-Fi.

On July 11, 2022, RIDOT released a public survey to solicit feedback. Our survey includes a brief background for participants to understand that we are collecting feedback from the public on EV charging stations and EVs in general. The results of this survey will impact our deployment plans moving forward. A full printout of the survey has been attached as Appendix A. RIDOT will continue to work with interested stakeholders as we move forward. This includes the public release of any material on the landing page and the RIDOT website so as not to exclude companies that have not reached out.

3.1 Stakeholders Involved in Plan Development

Following federal guidance and ongoing local efforts, RIDOT has worked with the group core team, including the OER and the DEM. Our core team has been working with a large group of technical advisers. The technical advisers include the following:

- Federal
 - Federal Highway Administration
 - National Renewable Energy Laboratory
 - U.S. Joint Office of Energy and Transportation
 - Volpe National Transportation Systems Center
- Governor's Office
- Rhode Island Executive Climate Change Coordinating Council (EC4)

- Rhode Island State Agencies
 - Rhode Island Airport Corporation (RIAC)
 - Rhode Island Department of Administration (DOA)
 - Rhode Island Department of Health
 - Rhode Island Department of Labor and Training
 - Rhode Island Division of Capital Asset Management and Maintenance
 - Rhode Island Division of Motor Vehicles
 - Rhode Island Division of Statewide Planning
 - Rhode Island Emergency Management Agency
 - Rhode Island Office of Accounts and Control
 - Rhode Island Public Utilities Commission and Division of Public Utilities and Carriers
- Quasi-public Agencies
 - Quonset Development Corporation
 - Rhode Island Coastal Resources Management Council
 - Rhode Island Commerce Corporation
 - Rhode Island Infrastructure Bank
 - Rhode Island Public Transit Authority (RIPTA)
- Community-based Organizations
 - Clean Fuels Alliance America
 - Environmental Council of Rhode Island
 - Green Energy Consumers Alliance
 - Ocean State Clean Cities Coalition
 - Rhode Island Environmental Education Association
 - Rhode Island League of Cities and Towns
- Regional Organizations
 - Georgetown Climate Center
 - New England Convenience Store and Energy Marketers Association (NECSEMA)
 - Northeast States for Coordinated Air Use Management (NESCAUM)
 - Partners for a Zero Emission Vehicle Future (PZEVF)
 - Transportation and Climate Initiative
- Utilities
 - Rhode Island Energy (formerly National Grid)
- Tribes
 - Mashantucket (Western) Pequot Tribal Nation
 - Narragansett Indian Tribe
 - Wampanoag Tribe of Gay Head (Aquinnah)
- Private-sector Operators
 - ChargePoint

RIDOT received feedback from several local organizations in June and July while developing this Plan. On June 10, 2022, NECSEMA's initial comments were received; the organization supports EVs and suggested convenience stores as ideal locations for hosting publicly accessible DCFCs to sustain tourism and business travel and support EV drivers who do not own a home charger. NECSEMA recommended a low, medium, and high ranking system based on traffic patterns. RIDOT agrees with NECSEMA that the prioritization for DCFC placement should incorporate average daily traffic counts to help prioritize build-out and that assigning a low, medium, and high ranking will help prioritize initial, interim, and final charger placement and build-out over the 5-year plan. On June 25, 2022, RIDOT received a letter from PZEVF regarding our Plan. We welcomed the feedback and agree that freight is an important consideration for emissions and climate change impacts. On July 1, 2022, RIDOT received comments from Green Energy Consumers Alliance, including comments on our first stakeholder meeting and planned report contents. Our core team met on July 5, 2022, to discuss the report, and agreed that the best approach is to align with mandates to help the public rather than on a corridor-by-corridor basis once the Interstate 95 designated AFC is certified as fully built out. Since developing this Plan, RIDOT has met with NECSEMA, and received feedback from Alliance for Automotive Innovation, Acadia Center, and the Charge Ahead Partnership. All written feedback and written recommendations have been attached as Appendix B.

3.2 Public Outreach

RIDOT must manage stakeholder expectations and communicate key messages to meet the outreach objectives. RIDOT developed immediate tools to help communicate the NEVI Plan and longer-term strategies to explain and solicit feedback from the community and stakeholders. RIDOT has launched a project website located here: <https://www.dot.ri.gov/projects/EVCharging/index.php>.

The website overviews federal funding and EVSE, the NEVI Formula Program, and the previous 2020 RIDOT Pilot Program. Visitors are encouraged to submit a comment and their email addresses to be kept up to date with events and information.

RIDOT intends to keep stakeholders informed through meetings, providing current information on the EV Charging Stations webpage, social media updates, and blasts to the mailing list.

In the future, RIDOT's website can be updated with the public survey results, maps, and new information as it becomes available. The website will be ADA compliant and include information regarding Title VI of the Civil Rights Act, local support for workplace development, and small-business participation.

4. Plan Vision and Goals

Under the NEVI Formula Program, the formula funding provides for DCFC stations to be located less than 50 miles apart, to be within 1 mile of a federally designated vehicle AFC, and to have at least four chargers supporting a speed of 150 kW with a total electric capacity of at least 600 kW.

Rhode Island intends to provide all current and future EV drivers with increased confidence that they can make short and long trips without running out of fuel and mitigate range anxiety. RIDOT's **vision** for this Plan is to have a safe and connected transportation system network that encourages EV adoption through improved public infrastructure supporting Rhode Island's climate, equity, and safety goals.

We are committed to following the national guidance combined with our local needs and expertise to provide the best possible transportation system network. To help guide our systems engineering process, our stakeholders have developed a high-level description of **overall goals** as follows:

- **Improve Local Access to EV Charging:** Rhode Islanders' access to electric vehicle charging is a top priority. Our state is car-centric and relies on our roadways and facilities to support driver needs. Local drivers' needs will only increase over the near term: President Biden outlined a target of 50 percent EVs by 2030, 18 out of the 20 largest vehicle manufacturers are committed to more affordable EVs, and there were more than 10 million electric cars on the road in 2020. Automakers, industry, and utilities continue to announce major progress in EVs and EV-related investments. 2022 will be a pivotal year as states invest. Coordination among states, utilities, the private sector, and the federal government over the next few years will be essential to improving access to EV charging and growing the EV market. Although most EV drivers are expected to charge their vehicles primarily at home, public charging infrastructure will provide them with options for charging while on the go and afford critical charging opportunities to EV drivers who do not have access to residential charging. This Plan outlines investment opportunities to provide publicly available charging stations close to interstates and National Highway System roadways where there are few driveways and garages, such as at commercial destinations and longer routes between cities. The next 5 years are key in providing access to additional charging stations for our public.
- **Deliver National Connectivity:** It takes a relatively short distance and amount of time to cross state borders in New England. The Interstate 95 corridor and local routes provide access to Massachusetts and Rhode Island for commuting, freight traffic, shopping destinations, vacation areas, and special events. As a local and through route, increasing access to EV charging along this route makes it more convenient for drivers traveling in both directions.
- **Focus on Equitable Access and Justice40 Communities:** As advocates for the people of Rhode Island, we encourage focused efforts to provide near-term AFCs to Rhode Islanders who have been historically underserved and overburdened in disadvantaged communities. Persons of disadvantaged status are less likely to have the outdoor space and authority to charge at home and need alternative access to charging stations. Based on the Justice40 Interim Guidance, provided by the U.S. Department of Transportation (USDOT) and U.S. Department of Energy (DOE), several DACs are in Providence County and Bristol County.⁶ Each of these communities is served through increasing access to fast charging along Interstate 95. Our mission is to prioritize access for persons without household charging who need fast charging in safe places. Using the USDOT Screening Tool for Equity Analysis of Projects, only 7 percent of households statewide have zero vehicles. Along the Interstate 95 corridor in the Providence metropolitan area, only 18 percent of households have zero vehicles.⁷
- **Aid Rural Areas:** Based on the U.S. Department of Agriculture⁸ and Rhode Island Statewide Planning Program,⁹ a significant portion of Rhode Island meets rural area measurements. Including corridors in these rural areas, where charging station use rates could be lower, allows RIDOT to help lower fuel costs and costs of ownership, promote economic development, reduce emissions, and support partnerships to increase future benefits.
- **Help EV Workforce Development:** As a public agency, current and future EV workforce development is critical to state planning. By focusing on bringing EVSE along Interstate 95 to the DACs and fostering competitive grants to

⁶ <https://anl.maps.arcgis.com/apps/webappviewer/index.html?id=33f3e1fc30b476099923224a1c1b3ee>

⁷ <https://hepgis.fhwa.dot.gov/fhwagis/buffertool/>

⁸ https://www.ers.usda.gov/webdocs/DataFiles/53180/25594_RI.pdf?v=0

⁹ https://planning.ri.gov/sites/g/files/xkqbur826/files/img/Transp_Urban_Rural_boundary_Map_1.pdf

increase local participation in build-out, especially for disadvantaged business enterprises, our proposed corridors will bring the best benefit to the Ocean State public and help develop tomorrow's EV workforce.

- **Reduce Emissions:** Transportation is our largest source of greenhouse gases, constituting about 35 percent of Rhode Island's greenhouse gas emissions.¹⁰ Vehicle electrification and supporting infrastructure offer a technology pathway for continuing to move Rhode Island's people and goods with lower greenhouse gas and air pollutant emissions, improve air quality, and reduce reliance on foreign petroleum.
- **Support Coastal Urban Development:** Rhode Island experiences seasonal travelers and is a popular vacation destination. Along with the coastal communities and densely populated Newport and Washington Counties, no DCFC is publicly accessible. Target is opening with public chargers that are part of the Tesla network, and some hotels offer charging to clientele. As a state, we host several special events and music festivals that significantly contribute to an increase in vehicles. While not explicitly in the national requirements, the coastal communities and tourist travel are unique to Rhode Island and must be included. Many travelers and visitors cannot charge at their destinations, rentals, or event locations.

4.1 5-Year Goal

As part of this Plan, the federal template requires RIDOT to set a quantified target. To set this target, we reviewed the political priorities, available data, overall market impact, the Ocean State's needs, and what we have control over. On April 10, 2021, Governor Dan McKee signed the 2021 Act on Climate into law, which sets mandatory, enforceable climate emissions reduction goals to achieve net-zero emissions economy-wide by 2050.¹¹ As of March 2022, 16 states, including Rhode Island, have adopted California's ZEV regulations under Section 177 of the Clean Air Act, which requires the manufacturers to deliver a certain annual percentage of ZEVs to Rhode Island, increasing to 100 percent ZEVs by 2035.¹² Rhode Island has also announced its intent to adopt California's Advanced Clean Trucks (ACT) Rule, which requires manufacturers to deliver an increasing percentage of their annual sales as ZEVs.¹³ We strive to make sales of all medium- and heavy-duty vehicles ZEVs by 2050.

On July 7, 2022, the Rhode Island OER launched the DRIVE EV rebate program. This \$1.25 million initiative provides rebates "to support the adoption of electric vehicles by Rhode Island residents, small-businesses, non-profits, and public sector entities." Rebates are available for new and used battery-electric vehicles (BEVs), fuel cell electric vehicles (FCEVs), and plug-in hybrid electric vehicles (PHEVs). DRIVE EV provides an additional rebate based on income eligibility (www.drive.ri.gov). This program will support purchases of around 600 EVs.

In the near term, the governor has set a target of 43,000 ZEVs by 2025. Using the FHWA Congestion Mitigation and Air Quality Improvement (CMAQ) Program tool for emissions calculations, switching over just 20 percent of the current vehicle fleet in Rhode Island to EVs in the next 5 years leads to an emission reduction for carbon monoxide of 154 kilograms per day (kg/day), and almost 95 kg/day of nitrogen oxide, improving air quality and, ultimately, local health. ZEV adoption is critical to reducing smog and greenhouse gas emissions. Argonne National Laboratory's ATRAVEL shows that Rhode Island currently has a diesel particulate matter concentration of 0.52 microgram per cubic meter ($\mu\text{g}/\text{m}^3$), which is higher than the national average of 0.48 $\mu\text{g}/\text{m}^3$. RIDOT's role is to support charging station infrastructure and reduce range anxiety. Our overall goals support EV growth and adoption statewide. Our target to meet the federal requirement is within our control and the near term. For those reasons, **the goal is to fully build out Interstate 95 and build two additional stations, meeting the NEVI requirements, including 97 percent reliability. Data will be required as part of RIDOT contracts and released publicly to inform planning policy and program decisions.** As the program matures, we will establish more metrics, as discussed in Section 13, Program Evaluation.

5. Contracting

RIDOT plans to implement a competitive grant program that will involve legal agreements with the grant recipients to install, operate, and maintain fast EV charging stations throughout the Ocean State. These agreements will include requirements for data reporting, reliability, and disadvantaged business enterprise contract involvement. Working with the private sector, RIDOT can use the funds in the near term and include contract requirements for operations and maintenance, including uptime. RIDOT will reserve funds and make contract obligations to ensure 97 percent uptime, considering a re-release of the contract should a contractor not be able to meet its obligations. RIDOT is also considering multiple site operators to promote competition. In

¹⁰ <http://www.dem.ri.gov/programs/air/ghg-emissions-inventory.php>

¹¹ <https://climatechange.ri.gov/act-climate>

¹² <https://ww2.arb.ca.gov/our-work/programs/zero-emission-vehicle-program/about>

¹³ <https://www.nescaum.org/documents/mhdv-zev-mou-20220329.pdf>

addition to the contracting mechanism, RIDOT will explore a value-based procurement strategy that includes Justice40¹⁴ benefits as a critical scoring mechanism through a request for proposal (RFP).

In addition to deployment activities, RIDOT may contract for data collection, analysis, and stakeholder outreach to continue supporting the program. This outreach will focus on communities and contractors in places where EV charging infrastructure will be installed.

6. Existing and Future Conditions Analysis

Rhode Island borders Connecticut, Massachusetts, and the Atlantic Ocean, with over a million residents. The state terrain along the ocean leads from coastal lowlands, including Aquidneck Island and Jamestown, into rural woodlands. Rhode Island experiences all four weather seasons, with large ranges of temperatures daily and annually and considerably diverse weather over short periods. The DEM reports that “annual precipitation averages 42 to 46 inches over most of the State, with a tendency for decreasing amounts from west to east. . . . The average annual snowfall in Rhode Island increases from about 20 inches on Block Island and along the southeast shores of Narragansett Bay to 40 to 55 inches in the western third of the state.”¹⁵ The National Oceanic and Atmospheric Administration National Centers for Environmental Information released a state climate summary for Rhode Island in 2022, stating that “temperatures in Rhode Island have risen almost 4°F since the beginning of the 20th century.” Annual precipitation has increased since 1985, with the highest number of extreme events between 2004 and 2014. The sea level has also risen 9 inches faster than the global average.¹⁶ This is a critical time to reduce Ocean State emissions negatively impacting climate change.

According to data from the DEM, as of June 2022, there are 5,627 registered EVs in Rhode Island. In February 2022, there were 4,869 registered EVs (Figure 3). That is a 115.4 percent increase over 5 months, even with supply chain, delivery, and economic issues. This increase is expected to be over 10 times the sales between 2015 and 2022. Government programs are also supporting this market growth. As mentioned, on July 7, 2022, the Rhode Island Office of Energy Resources launched the DRIVE EV rebate program. This \$1.25 million initiative provides rebates “to support the adoption of electric vehicles by Rhode Island residents, small-businesses, non-profits, and public sector entities.” Rebates are available for new and used BEVs, FCEVs, and PHEVs. DRIVE EV provides an additional rebate based on income eligibility (www.drive.ri.gov).

As of March 2022, 16 states, including Rhode Island, have adopted California’s regulations that require the manufacturers to deliver a certain annual percentage of ZEVs to Rhode Island, increasing to 100 percent ZEV by 2035.¹⁷ sales of a certain number of ZEVs by 2035. In the near term, the governor has set a target of 43,000 ZEVs by 2025.¹⁸ Rhode Island has also announced its intent to adopt California’s ACT Rule, which requires manufacturers to deliver an increasing percentage of their annual sales as ZEVs.¹⁹ We strive to make sales of all medium- and heavy-duty vehicles ZEVs by no later than 2050.

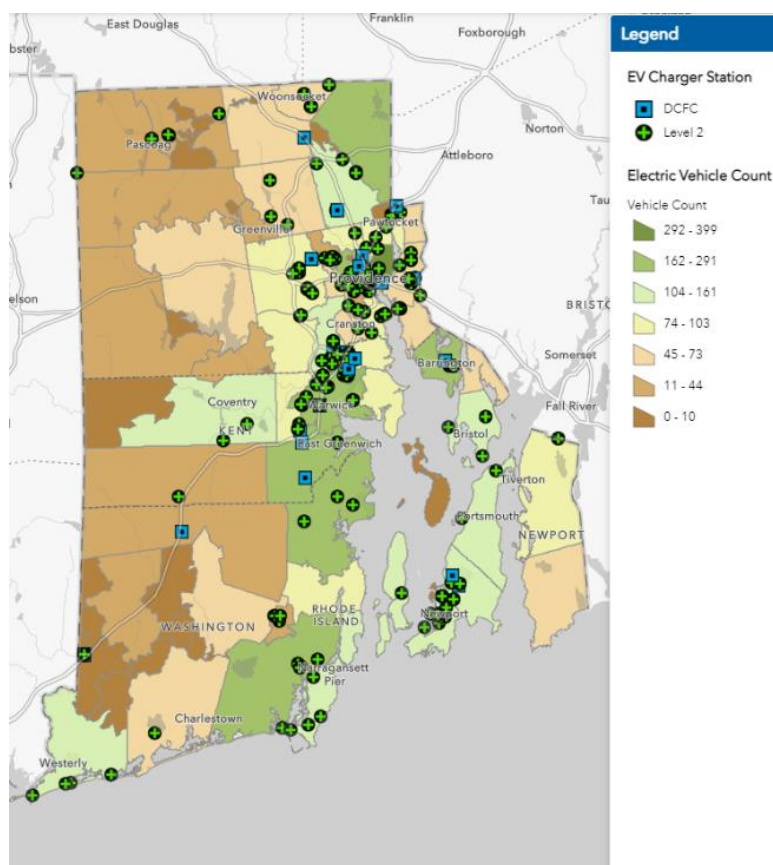


Figure 3: Rhode Island Electric Vehicle Registration by County Map

¹⁴ <https://www.whitehouse.gov/omb/briefing-room/2021/07/20/the-path-to-achieving-justice40/>

¹⁵ <http://www.dem.ri.gov/climate/climate-overview-ri.php>

¹⁶ <https://statesummaries.ncics.org/chapter/ri/>

¹⁷ <https://ww2.arb.ca.gov/our-work/programs/zero-emission-vehicle-program/about>

¹⁸ <https://energy.ri.gov/sites/g/files/xkgbur741/files/documents/Transportation/Rhode-Island-ZEV-Action-Plan-Final-2016.pdf>

¹⁹ <https://www.nescaum.org/documents/mhdv-zev-mou-20220329.pdf>

The electric grid is critical in servicing this increase in power demand at EV charging stations. Rhode Island Energy, formerly National Grid, provides services for 500,000 electric and 274,000 gas customers. Rhode Island Energy met with the EC4 Interagency Group on May 9, 2022, to discuss the current engagement process, the Rhode Island System Data Portal, and any related initiatives.

6.1 State Geography, Terrain, Climate and Land Use Patterns

The U.S. Census Bureau most recently defined rural as “any population, housing, or territory NOT in an urban area.”²⁰ A significant portion of Rhode Island meets rural area measurements. An image file has been included that was used as a reference for rural counties using U.S. Census data (Figure 4).²¹ Including routes for potential EVSE in these rural areas allows RIDOT financial contributions to lower fuel costs and costs of ownership, promote economic development, reduce emissions, and support partnerships to increase future benefits. Adding EVSE infrastructure is necessary to support rural areas.

The Rhode Island State Climatologist defines the state’s geography, climate, and terrain as follows:

“[Rhode Island] extends for 50 miles in a north-south direction and has an average width of about 30 miles. The total area, including Block Island some 10 miles offshore, is 1,214 square miles.

“There are three topographical divisions of the State. A narrow coastal plain lies along the south shore and Narragansett Bay with an elevation of less than 100 feet. A second division lies to the north and east of the Bay with gently rolling uplands of up to 200 feet elevation. The western two-thirds of Rhode Island consist of predominantly hilly uplands of 200 to 600 feet elevation but rising to a maximum of 800 feet above sea level in the northwest corner of the State. . . .

“The chief characteristics of Rhode Island’s climate may be summarized as follows: (1) equitable distribution of precipitation among the four seasons; (2) large ranges of temperature both daily and annually; (3) great differences in the same season of different years; and (4) considerable diversity of the weather over short time periods. These characteristics are modified by nearness to the Bay or ocean, elevation and nature of the terrain. . . .

“Annual precipitation averages 42 to 46 inches over most of the State, with a tendency for decreasing amounts from west to east. It varies from about 40 inches in the immediate southeastern Bay area and Block Island to 48 inches in the western uplands. . . .

“The average annual snowfall in Rhode Island increases from about 20 inches on Block Island and along the southeast shores of Narragansett Bay to 40 to 55 inches in the western third of the State. Areas near the western and northern shores of the Bay, including greater Providence, have an average range of 25 to 30 inches of snow per year. During mild winters, these snowfall totals can be significantly less.”²²

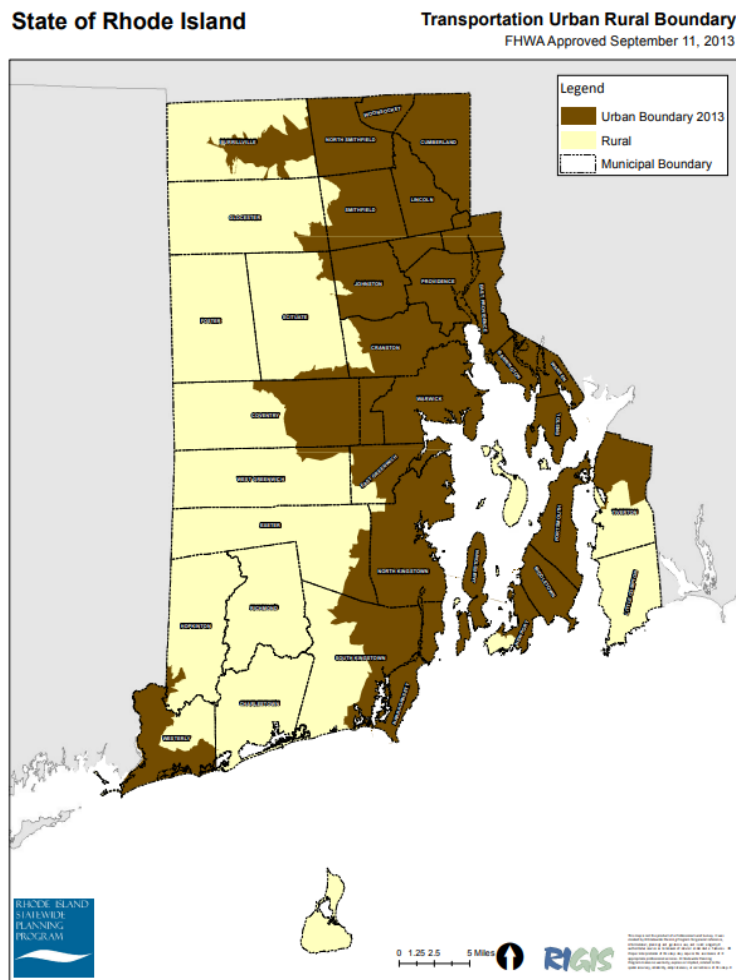


Figure 4: Rhode Island Rural and Urban Areas Map

²⁰ <https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=49cd4bc9c8eb444ab51218c1d5001ef6>

²¹ http://www.planning.ri.gov/img/Transp_Urban_Rural_boundary_Map_1.pdf

²² <http://www.dem.ri.gov/climate/climate-overview-ri.php>

Land Use Patterns

The Ocean State is home to beautiful beaches, metropolitan areas, historic buildings, green spaces, and residential neighborhoods. Our land is a limited resource, and helping manage the land use for Rhode Island while planning is an essential public service to ensure that how we arrange our communities meets our needs. Rhode Island's current population and housing density are among the highest in the country, yet the state also ranks high in forested land. According to the Department of Planning, *Vision 2025 Rhode Island Land Use Policies and Plan*, "75 percent of the population resides in a 40-mile-long urban/suburban corridor along the shores of Narragansett Bay and in the valleys of the Blackstone and Pawtuxet rivers. This corridor contains nearly all of the public infrastructure, major transportation routes, and institutional and cultural centers. . . . R.I. Division of Planning's most recent profile of statewide land use, *Land Use Trends 1970-1995*, found that in those 25 years, Rhode Island developed its land at a rate much higher than historic trends. It took over 300 years to develop the first 20 percent of the state's land, and only 25 more years to develop another 9 percent." Since 1995, there have been vacant lots, redevelopment property projects, and land conservation investments. Sprawl continues. "About 30 percent of the land that was undeveloped in 1995" was developed by 2005. "In some of the more rapidly developing communities, building activity has consumed as much as 75 percent of vacant land."²³ Figure 5 was provided as part of the Long-Range Transportation Plan²⁴ to illustrate the state's population density. Most of the population lives near Providence, relying on the roadway network for critical needs.

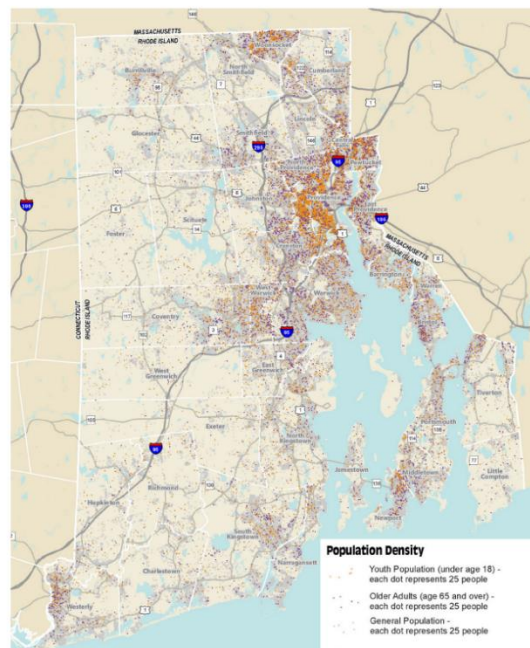


Figure 5: Rhode Island Population Density Map

6.2 State Travel Patterns, Public Transportation Needs, Freight and Other Supply Chain Needs

Travel Patterns

Most Rhode Islanders rely on their vehicles to travel to work, school, recreation, utility trips, and other locations. In 2016, 85 percent of people in Rhode Island drove alone to work, compared with the national average of 76 percent. Less than 3 percent of the public used public transportation. Due to the state's population density and car-centric nature, we experience congestion. Many segments of the interstates and freeways during peak travel hours surround the Greater Providence, Cranston, and Warwick areas. Rhode Island has access to travel time and reliability data.²⁵

The areas on Figure 6 highlighted in yellow and red experienced high congestion levels. These data are from 2017 to reflect pre-COVID-19 traffic patterns. Traffic patterns have fluctuated, but the state does typically experience congestion on these routes.²⁶ These are also daily traffic patterns. The Rhode Island DOA Congestion Management Process (CMP) Final Plan states, "The Providence Metro region is the most congested area in the state with roughly 10 percent of all highways within the CMP network congested during a typical morning peak hour and 17 percent of all highways congested during a typical evening peak hour. . . . The average congestion levels among all highways within the Providence Metro region varies between 15 and 20 percent through the year. The congestion level within the City of Providence is higher, varying between 35 and 55 percent of highways identified as congested. The higher levels of congestion appear in spring and fall while the congestion during the summer months appears to be lower. This may be related to schools and

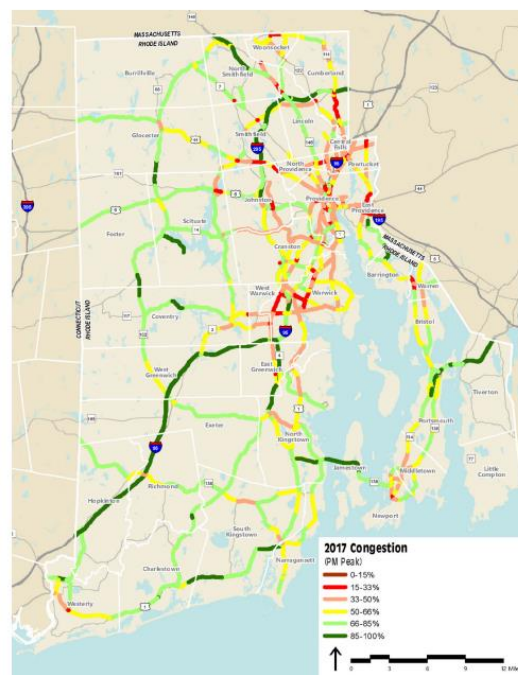


Figure 6: Rhode Island Congestion Map

²³ https://planning.ri.gov/sites/g/files/xkqbur826/files/documents/121/lu_exec.pdf

²⁴ <https://planning.ri.gov/sites/g/files/xkqbur826/files/documents/trans/2020/Final-LRTP-December-2020.pdf>

²⁵ <https://planning.ri.gov/sites/g/files/xkqbur826/files/documents/trans/2020/Final-LRTP-December-2020.pdf>

²⁶ <https://planning.ri.gov/sites/g/files/xkqbur826/files/documents/trans/2020/Final-LRTP-December-2020.pdf>

colleges and universities being open during spring and fall.”²⁷ Because the Providence area, inside Interstate 295, is the most densely populated, the congestion along these roadways will continue to increase into the future.

In the summertime, Rhode Island experiences a rush of traffic to the coastal communities along the ocean. Washington, Bristol, and Newport Counties all have tourist areas that experience congestion and safety issues due to the large influx of tourists and automobiles in the summer. Roadways such as Route 1, Route 4, Route 114, Route 138, and Route 24 into Massachusetts experience traffic volumes much greater than average at lower speeds.²⁸ The CMP Final Plan noted that these roadways still experience more traffic during weekdays, host local commuting traffic, and are critical pathways connecting the state. Despite inflation and rising gas prices, RIDOT anticipates increasing vehicles traveling to the Ocean State for vacation, Newport music festivals, sports, and other special events this summer.

Figure 7 displays the Rhode Island Energy heat map for available vehicle fleet transportation and distribution feeders. The Rhode Island electric distribution circuits shown on this map are color-coded based on their most recent annually forecasted percent loading, with the specific year identified in the map legend (for example, 2019 Load/Feeder Rating). This map identifies where additional capacity is expected to exist and can accommodate beneficial electrification of high-efficiency heat pumps and EVs. This helps EV infrastructure developers identify locations on the National Grid electric distribution network.²⁹ Based on our review of the Rhode Island Energy data and maps, even during the July 4th, 2022, holiday, with peak seasonal travel and electricity usage, the distribution feeders did not appear to exceed 70 percent load. This suggests there is capacity in the network for additional load in the near term.

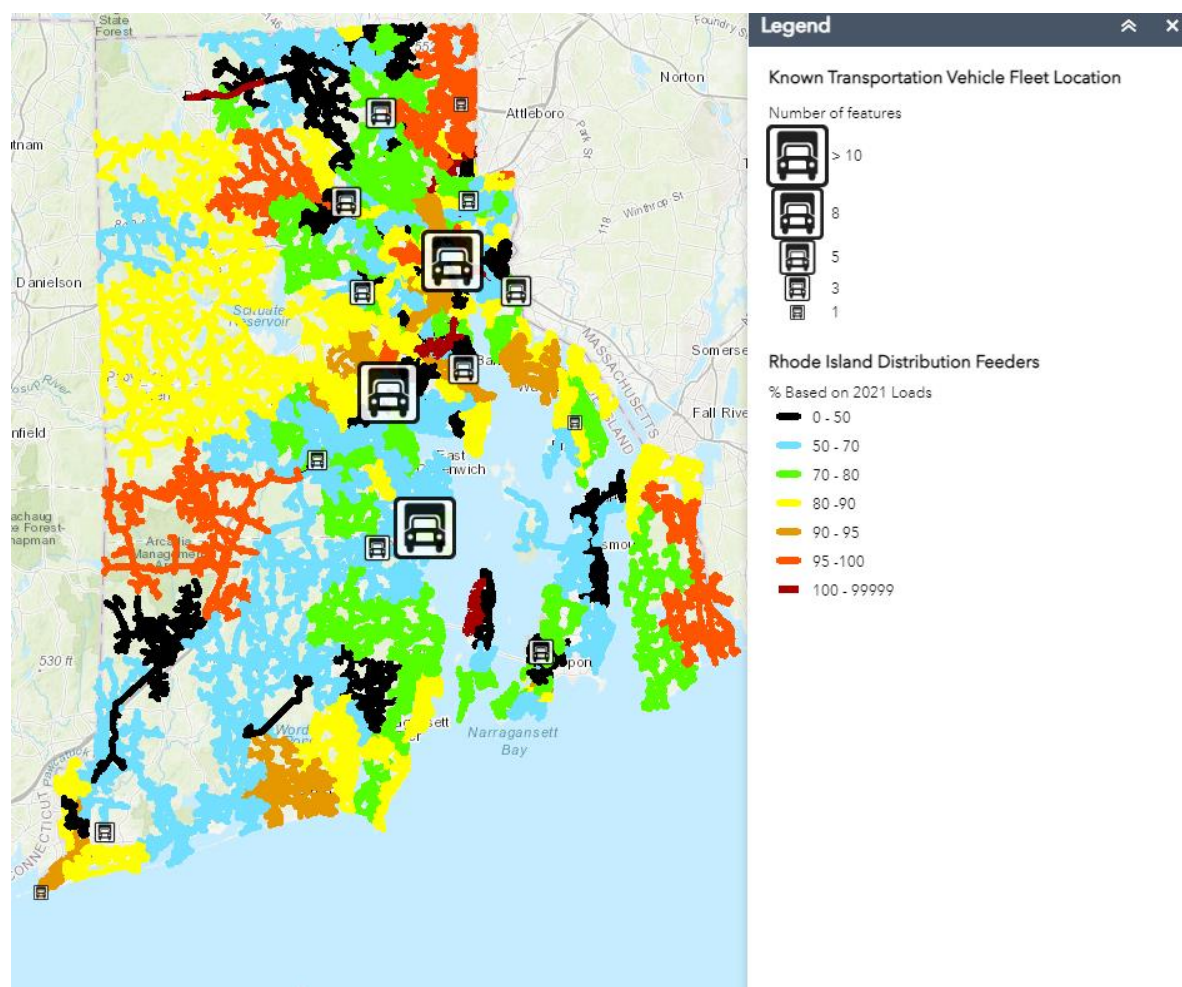


Figure 7: Vehicle Traffic and Rhode Island Distribution Feeders Capacity Map

²⁷ <https://planning.ri.gov/sites/g/files/xkqbur826/files/documents/LRTP/Congestion-Management-Process.pdf>

²⁸ <https://www.rigis.org/maps/traffic-counts>

²⁹ <https://ngrid.apps.nationalgrid.com/NGSysDataPortal/RI/index.html>

Public Transportation

The public transportation offered in Rhode Island includes the local RIPTA bus network, MBTA Commuter Rail, and Amtrak northeast. RIPTA serves 36 of the 38 communities, operates 7 days a week, and provides ADA-compliant paratransit services statewide. The RIPTA service includes stops at 32 Park n' Ride facilities. In 2020, RIPTA provided fixed-route bus service for 13,026,356 trips. RIPTA has conducted an electric bus pilot and ordered 14 new electric buses. The agency is committed to helping reduce emissions with more confidence as funding and the longer vehicle range are reliable.³⁰ RIPTA has long-term plans based on population and employment demand to continue serving the communities' needs best.

In addition to the bus system, there are six municipal ferry terminals throughout the state in Providence, Newport, Bristol, Portsmouth, North Kingstown, and New Shoreham.

Freight Network

Freight is a critical component of the supply chain, employment, and contributor to greenhouse gas emissions. At this point, our understanding of the NEVI guidelines refers to installing infrastructure to be publicly available or to accommodate multiple different duty vehicles. For example, RIDOT may choose to install chargers that would accommodate medium-duty and heavy-duty vehicles. DEM anticipates the adoption of California's ACT Rule, which requires the sale of at least 30 percent ZEV trucks by 2030 (depending on vehicle classification). By model year 2025, ZEV truck sales will need to be 55 percent of Class 2b to 3 truck sales, 75 percent of Class 4 to 8 truck sales, and 40 percent of truck tractor sales. The freight pathways through Rhode Island impact our network. We must now consider this impact when planning EVSE infrastructure for the Ocean State.

Interstate 95 is the hub of freight delivery and commuter traffic throughout the state, connecting intermodal facilities at Rhode Island T.F. Green International Airport, Port of Providence, and Port of Davisville. Additional truck corridors running north to the south include Interstate 295, Route 4, and Route 146. The main rail freight corridor is the Amtrak Northeast Corridor. The marine shipping corridor is Narragansett Bay via the Port of Davisville within the Quonset Business Park and the Port of Providence. East-west freight corridors are primarily limited to truck freight on Interstate 195, Route 6, and Route 44. In addition, rail connects Rhode Island to the national and Canadian rail networks through interchanges in Massachusetts, Connecticut, and New York.³¹ Figure 8, prepared by RIDOT as part of the 2022 Freight and Goods Movement Plan,³² illustrates the freight network, including the ports and Rhode Island T.F. Green International Airport. The Port of Davisville/Quonset Business Park and the Port of Providence are active international gateways.

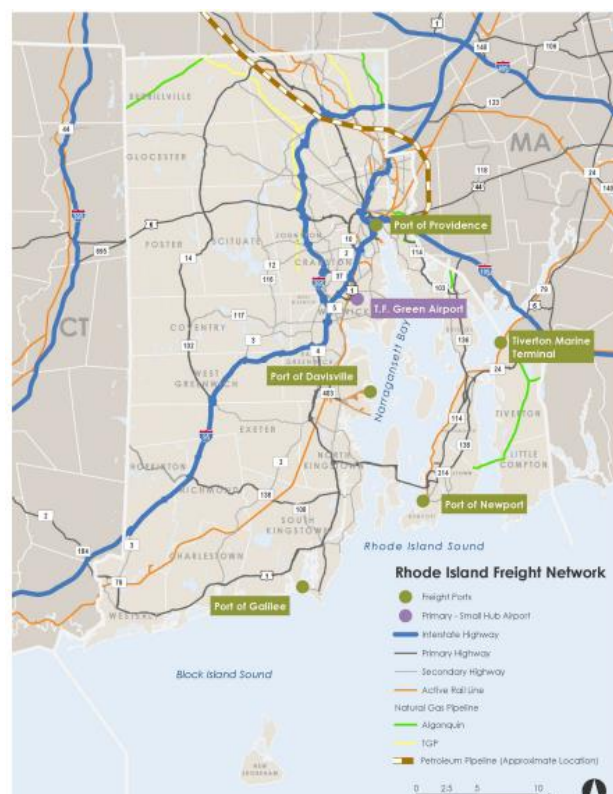


Figure 8: Rhode Island Map of Freight and Port Network

6.3 AFC - Corridor Networks

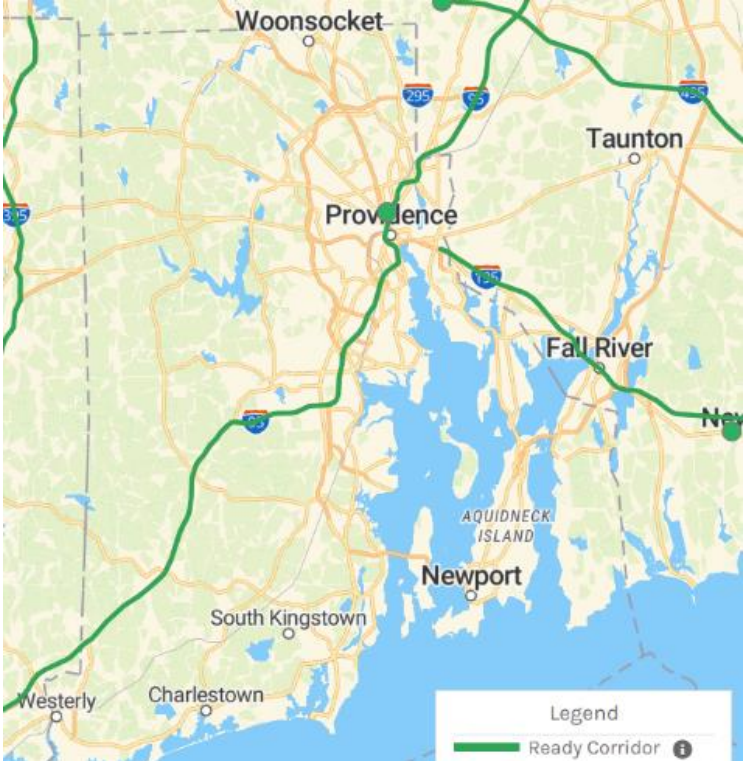
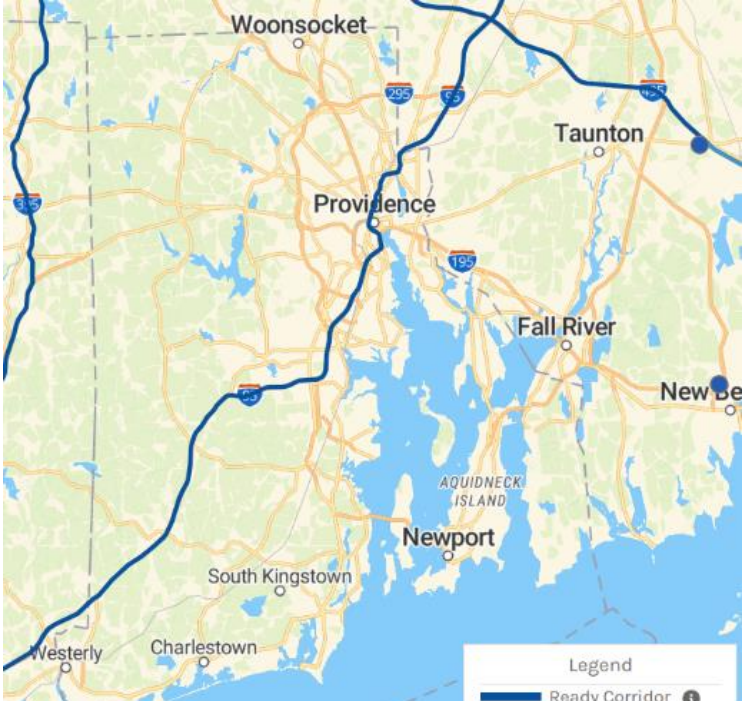
The existing AFCs (Table 1) were nominated during the first five rounds of the corridor designations. Following FHWA.gov, Interstate 95 is a designated AFC interstate, and Route 6 is a designated AFC U.S. Route/Highway. Interstate 95 was nominated in its entire length, from mile marker 0 at the Connecticut border to mile marker 43.2 at the Massachusetts state border. Interstate 95 includes Warwick, Cranston, Providence, and Pawtucket metropolitan areas, and three counties: Washington, Kent, and Providence. US 6 was also nominated as an essential link moving freight and goods throughout the state and region for hydrogen. The routes are displayed using federal tools online at driveelectric.gov as well. Presenting the existing corridors is to illustrate the current corridor status. No other corridors were nominated as part of the Round 6 nomination period. Interstate infrastructure is critical to the national build-out for Massachusetts and Connecticut connectivity.

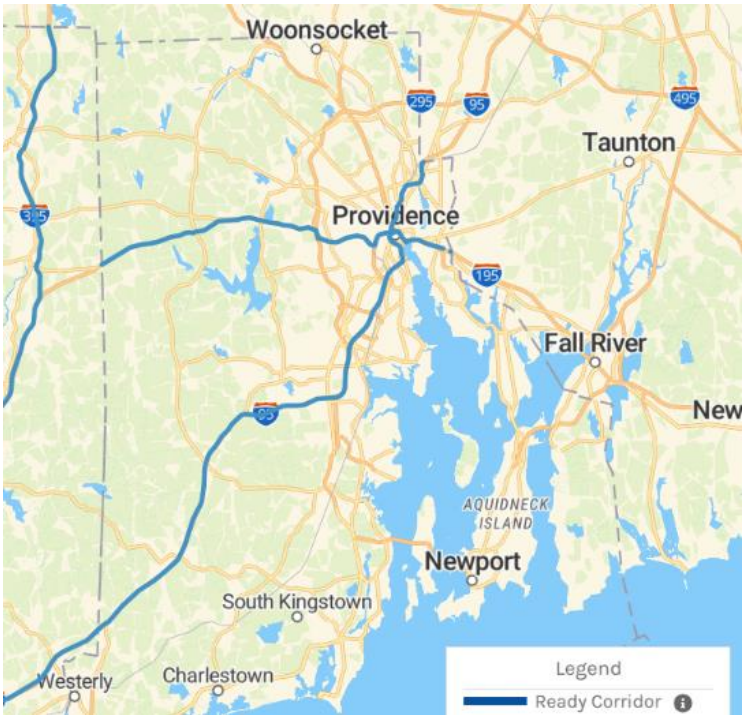
³⁰ <https://www.ripta.com/electric-bus/>

³¹ <https://planning.ri.gov/planning-areas/transportation/freight-planning>

³² https://planning.ri.gov/sites/g/files/xkqbur826/files/2022-06/2022_RI_Interim_Freight_Plan_Update_6_1_22.pdf

Table 1: Current Alternative Fuel Corridors

Alternative Fuel	Details	Map
<p>Electric Vehicle Ready Corridor</p>	<p>Interstate 95 Start: 0 mi End: 43.2 mi</p> <p>Interstate 195 Start: 0 mi End: 0.7 mi</p>	 <p>The map displays the Providence, Rhode Island area, including Woonsocket, Taunton, Providence, Fall River, Newport, South Kingstown, Westerly, and Charlestown. Interstate 95 and Interstate 195 are highlighted in green, indicating they are Electric Vehicle Ready Corridors. A legend in the bottom right corner shows a green line for 'Ready Corridor'.</p>
<p>Compressed Natural Gas Ready Corridor</p>	<p>Interstate 95 Start: 0 mi End: 43.2 mi</p>	 <p>The map displays the Providence, Rhode Island area, including Woonsocket, Taunton, Providence, Fall River, Newport, South Kingstown, Westerly, and Charlestown. Interstate 95 is highlighted in blue, indicating it is a Compressed Natural Gas Ready Corridor. A legend in the bottom right corner shows a blue line for 'Ready Corridor'.</p>

Alternative Fuel	Details	Map
Hydrogen Pending Corridor	<p>Interstate 95 Start: 0 mi End: 43.2 mi</p> <p>Route 6/ Interstate 195 Start: 0 mi End: 25.31 mi</p>	

There are currently no corridors designated as liquefied natural gas or propane ready or pending corridors.

There are three propane stations open to the public during the daytime hours at different U-Haul facilities. One of the three, U-Haul in Warwick, Rhode Island, is within 5 miles of Interstate 95.³³

6.4 Existing Locations of Charging Infrastructure Along AFCs

Existing charging stations have been deployed in the state over the past 10 years. There are about 300 charging stations in the state fielded and operated by different public and private entities.³⁴ The USDOT apportionment of Highway Infrastructure Program funds will be used not only to build out main corridors but also to help coordinate the use of all these stations and plan maintenance and upgrades. RIDOT funded an earlier EV charging station pilot project with 12 charging stations in two locations off Interstate 95. As a result of the IIJA, new formula and discretionary programs will be implemented for our state to strategically deploy EV infrastructure for publicly accessible EV charging and other alternative fuel infrastructure in designated AFCs.

Table 2 and Figure 9 include existing charging stations within a mile of Interstate 95, Rhode Island's Ready Corridor, that meet the NEVI requirements or that may be upgraded in the future to meet the NEVI requirements. Appendix C includes a full list of DCFC and Level 2 stations along Interstate 95.

Note that Site ID 167864 at Walmart in Providence is operated by Electrify America (the only one in the state) and includes four DCFCs, at least one of which is a 350-kW charger. It is also less than a mile from Interstate 95, so this privately owned Site ID 167864 satisfies Rhode Island's build-out requirements for the AFC. Similarly, Site ID 192735 includes a group of eight Tesla DCFCs at a shopping center off Interstate 95 in East Greenwich. On July 8, 2022,³⁵ the White House confirmed that Tesla will open up its Supercharger network. If this site becomes available to non-Tesla users soon, it will also satisfy NEVI build-out requirements, and this site is only 45 miles from the existing Waterford, Connecticut, EV charging site.

³³ <https://afdc.energy.gov/stations#/find/nearest?fuel=LPG>

³⁴ <https://afdc.energy.gov/stations#/find/nearest?fuel=ELEC>

³⁵ <https://www.forbes.com/wheels/news/tesla-opens-supercharger-network/>

Table 2: Existing Locations near AFC Interstate 95 as of July 2, 2022³⁶

Station ID	Station Name	Charger Level	Near Route	Location	No. of EV Connectors	EV Network
167864	Walmart	DCFC	Interstate 95	51 Silver Spring Street, Providence RI	4	Electrify America
165561 165635	DOT Hopkinton	DCFC	Interstate 95	0 Nooseneck Hill Rd., Hopkinton, RI	2	ChargePoint Network
165560 181115	DOT RT117	DCFC	Interstate 95	Rt 117 Park 'n Ride, Warwick RI	2	ChargePoint Network
204944	Ocean State Harley-Davidson	DCFC	Interstate 95	435 Nooseneck Hill Rd. Exeter, RI	1	ChargePoint Network
49711	Speedcraft Nissan	DCFC	Interstate 95	885 Quaker Ln, West Warwick, RI	1	Non-Networked
221087	Balise Chevrolet	DCFC	Interstate 95	1338 Post Rd Warwick RI	1	Non-Networked
72476	Whole Foods	DCFC	Interstate 95	151 Sockanosset Cross Rd, Cranston RI	1	ChargePoint Network
165228	Ocean State Harley-Davidson	DCFC	Interstate 95	35 Albany Rd, Warwick, RI	1	ChargePoint Network
198373	Hilton Garden Inn	DCFC	Interstate 95	220 India St, Providence RI	1	EVgo Network
151843	Providence Place	DCFC	Interstate 95	1 Providence Pl, Providence Ri	1	Volta
102400	East Greenwich Square - Tesla Supercharger	DCFC	Interstate 95	1000 Division Street, East Greenwich RI	8	Tesla
202687	Capital Good Fund	DCFC	Interstate 95	333 Smith St. Providence, RI	1	ChargePoint Network
217373 192734 192735	Steingold Volvo Cars	DCFC	Interstate 95	1001 Roosevelt Ave, Pawtucket, RI	2	ChargePoint Network

³⁶ <https://afdc.energy.gov/stations#/find/nearest?fuel=ELEC>

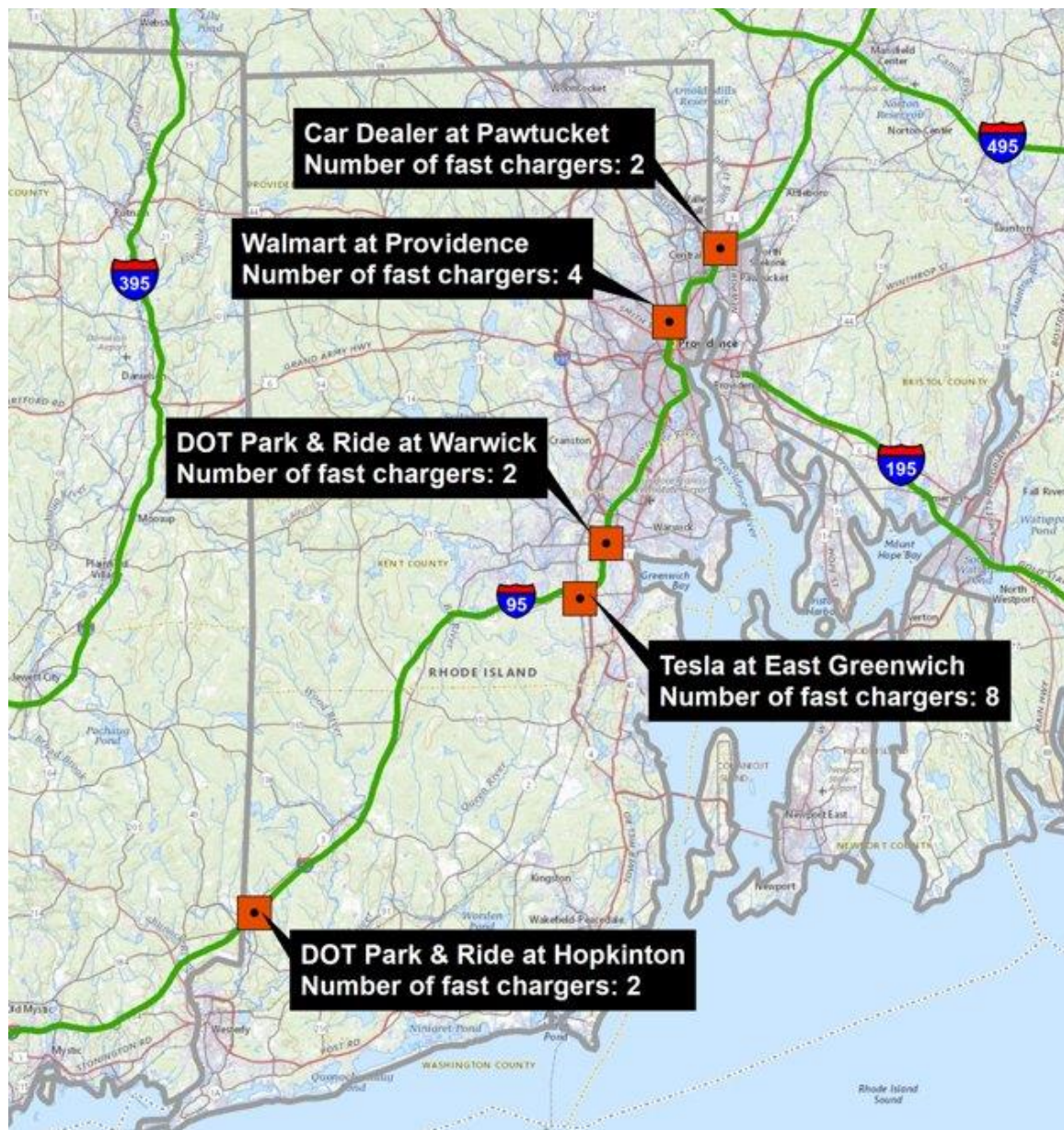


Figure 9: Rhode Island AFC and Existing DCFC Stations Map

6.5 Known Risks and Challenges

There are risks and challenges in the market and infrastructure to deliver our Plan in completion. EV availability has been a known issue, with many of the newest and most affordable EVs on backlog. During the pandemic, chip production has experienced pent-up demand and limitations, impacting the inventory. In spring 2022, with soaring gas prices and a lack of car inventory, the EV market depleted.

Based on our discussions with Rhode Island Energy, increasing the EV load can present uncertainty for planning and grid operations. We are working with the utility to mitigate the risk of transformer shortages. We will engage with Rhode Island Energy throughout all plans and take advantage of the public-facing distribution maps for planning. In addition, increasing the station density near Tesla locations may be a risk as the Tesla devices become public-facing. To deploy infrastructure on additional corridors, our challenge is to reach the rural and seasonal communities in the near term to reach most of the public while balancing private market deployments. Attracting operations and maintenance providers or contractors may be challenging due to our small number of EVSE devices, but we feel this may be an advantage to allow the workforce to ramp up to meet the

market's demand. A practical rollout along Interstate 95 in the near term helps alleviate the risk that direct revenues from providing charging services might not cover the cost of installation and operation of the equipment, or technologies might become obsolete.

For our vendors and contractors, the Buy America requirements may make procurement challenging for grant awardees. Rhode Island will meet with charging manufacturers to determine who considers their infrastructure as American and how to identify the label requirements for "Buy America." Rhode Island weather and coastal elements may also present issues in providing consistent and reliable service. RIDOT is aware of these issues and challenges, and we will work with the contractors and vendors to complete our projects on time and within budget while meeting the NEVI requirements.

7. EV Charging Infrastructure Deployment

Our overarching strategy for EV charging is to use the federal funds to provide the most benefit for the public to decrease driver range anxiety and support adoption. Our state is uniquely dense, with short-run segments supporting local, regional, seasonal, and freight traffic. We have an existing network based on the previous investments born from but not limited to the Volkswagen settlement, Rhode Island Energy, charger programs, and Park 'n Ride facilities. Our state agencies have invested in exploring and promoting incentives, performing outreach, and improving reliability.

Rhode Island's designated AFC for EVs is Interstate 95. There is some signage currently along the interstate. This is a critical roadway, and the NEVI Formula Program funding cannot be used outside designated AFCs until the Secretary of Transportation certifies that Interstate 95 is built out. Section 6.4 presents Site ID 167864 as an existing Electrify America station at the Walmart at 51 Silver Springs Street in Providence, Rhode Island. This station is less than a mile from the highway, 5 miles from the Massachusetts border, and 39 miles from the Connecticut border. This station also has four high-powered charging units that meet the requirements. It is also in a Justice40³⁷ disadvantaged community. We will work with the private sector and the vendor to help apply the funds to improve the station's signage, usability, and reliability in the first year, making the Interstate 95 AFC compliant with NEVI requirements for certification.

After the Secretary of Transportation certifies the corridor build-out, we will use the funding strategically to serve the most Rhode Island travelers possible while balancing the impact on the grid, coastal areas, and rural access.

1. RIDOT plans to use its resources to increase fast EV charging station awareness and reliability of existing fast charging stations. RIDOT will work with the private sector to help improve and promote the Walmart site. The existing network can be promoted on smartphone apps, signage, websites, advertisements, and targeted areas as determined in the public survey results. As stated, this location is also in a Justice40 community. Over the next 5 years, we are dedicating resources to increasing awareness, and our approach includes working with developers, signage, and public outreach strategies.
2. To serve Rhode Islanders, we must increase access to fast EV chargers in the Providence metropolitan area. The public is car-centric, and although RIDOT has had success in providing Park 'n Ride facilities to facilitate shared transport, none exist on the northern portion of Interstate 95, where most of Rhode Island's population and almost all of our Justice40 communities are located. Ideally, RIDOT would have access to large areas around Providence to help build new dedicated fast EV charging stations, but the impacts, cost, and grid constraints will create issues in the near term. Listening to stakeholder feedback that local businesses and convenience stores are eager to install fast EV charging stations and provide amenities, we will use the funds to work with interested local parties and private partners to provide fast, cost-effective charging at locations within a mile of Interstate 95, Interstate 195, and Interstate 295. This will help offset low use at first, increase grid capacity, encourage private participation, and critically address uptime reliability requirements, particularly with local businesses and parties. It also allows for resources to be allocated on the eastern side of the state in Bristol County, creating increased access. By investing with the private sector, the benefit of the funds is expanded, creating opportunity for near-term metropolitan and statewide deployment. RIDOT will structure contracts to require its partners to meet the federal station requirements for reliability, security, and access while prioritizing the participation requirement for disadvantaged business enterprises.
3. In the Providence metropolitan area, Route 146, a major corridor connecting local and through travelers, is currently undergoing rehabilitation. RIDOT will work with Planning on EVSE near Route 146 and stakeholders to promote the integration of EV charging access along the route during the planning of the rehabilitation. Planning will work with stakeholders and coordination to include EVSE in large capital investment projects moving forward. We will explore EVSE along the Route 146 corridor to build out EV charging, including electrical infrastructure, to NEVI standards. There are also several businesses and potentially interested parties that RIDOT could partner with to provide EVSE along this route.
4. We plan to upgrade two existing Park 'n Ride facilities along Interstate 95 that RIDOT owns. The Ashaway Park 'n Ride facility along the Interstate 95 corridor in Hopkinton is near the Connecticut border. Connecticut does not have an existing station near this border or near-term plans to install one. RIDOT will prioritize the Ashaway location as important to increasing access by

³⁷ <https://anl.maps.arcgis.com/apps/webappviewer/index.html?id=33f3e1fc30bf476099923224a1c1b3ee>

creating national interstate connectivity. This is also a great opportunity to build a user-friendly, inviting station at the entrance of Rhode Island for users to charge their EVs. We plan to provide adequate ADA parking space, lighting, physical security considerations, restrooms, and our best rest stop amenities. For example, any site partners must address the location's need to be publicly available 24/7 and report back to local authorities in the event of an incident. The site will require upgrading the current two DCFCs. If possible, both locations will include a 350-kW charger to help future-proof the technology and accommodate faster charging. Our contract documents will require data collection, monitoring, reporting, and reliability requirements of at least 97 percent. Upgrading this existing station rather than a larger build-out elsewhere helps minimize the burden on the energy grid. In the future, we will balance increasing station capacity in different areas based on the user data. For example, DCFC stations experiencing a lot of traffic and users will be explored to increase the capacity. Stations that experience low use will be examined for vehicle traffic, user experience, and other explanations.

Moving north along Interstate 95 toward Providence, there are two DCFCs and three Level 2 chargers at the Route 117 Park 'n Ride facility in Warwick, Rhode Island. This free, fast charging station is less than a mile from Interstate 95, providing critical access to travelers near Rhode Island T.F. Green International Airport or on their way to and from Providence. Upgrading both Park 'n Ride facilities allows RIDOT to have additional purchasing power without overburdening the grid or making long-term investments in areas with lower daily traffic volume.

In the next sections, we will illustrate the network connectivity provided through this installation. It is important to note that the Ashaway Park 'n Ride is less than a mile from the Connecticut border, Warwick Park 'n Ride is about 17 miles from the Massachusetts border, and the distance between the two Park 'n Ride facilities is about 27 miles. Both are within a mile of Interstate 95, fulfilling the build-out requirements for this corridor if the energy needs can be met for four DCFCs. In addition, we assessed the current RIDOT Maintenance Headquarters that houses Level 2 chargers. At this time, this location is less desirable as a 24/7 facility because RIDOT locks the fence outside of working hours.

When we successfully increase EVSE capacity at the two Park 'n Ride locations, RIDOT will meet its goal in the next 5 years to fully build out Interstate 95 and build two additional stations, meeting the NEVI requirements, including providing 97 percent reliability.

5. Data collection and sharing, particularly among the transportation, energy, and environmental agencies, provides feedback paramount to reacting to public needs, improving customer and station host satisfaction, and promoting equitable and efficient investments. All data collected and reported must be available to the public in an easily digestible format. The data from the NEVI federal program and public usage, and so on must be made available to use data to inform future policy and program decisions. RIDOT will work with stakeholders, including the U.S. Joint Office of Energy and Transportation, to ensure our contracts require a suitable data management plan that satisfies the NEVI requirements and specifications.

6. RIDOT will spend the USDOT apportionment of Highway Infrastructure Program funds with a responsible, practical approach, fostering local workforce development for the operations, maintenance, and emerging technology markets. Several universities, community colleges, and technical groups are feeding into the local market. We are committed to working with these groups as they prepare the local workforce. Our contracts will foster competitive grants to increase local participation, especially for disadvantaged business enterprises.³⁸ We have included outreach for the local workforce to ensure resources are spent to grow the local workforce and help employ our public. In addition, we will follow all Buy America requirements when procuring station and infrastructure components.³⁹

7. Support EVSE Coastal Development and Contingency Reserve. The market is moving; we are not the only state performing installation activity. Although our estimates were conservative, inflation is at an all-time high and we want this Plan to address the areas we know need access immediately. However, we hope that the money will go further. We expect the costs to go down and requirements to shift. Our stated goals allow us to pivot and potentially expand our grant program to coastal areas. For example, if we have appropriate station density along a corridor, and allow for charging on both sides of Providence, we can move south quickly. In particular, Aquidneck Island is a current gap with a need to reduce using bridges or making long trips for fast charging. Tesla plans to install at a Target with public access, which we are focused on for coastal development. And based on the initial results of the survey, serving the coast is a common public priority.

This approach considers the current and projected needs of Rhode Islanders, federal guidance, and stakeholder feedback received to date. We urge the public and our private entities to read and provide feedback to this Plan, particularly concerning areas along or near our major corridors and methods to develop the local workforce. We ask the U.S. Joint Office of Energy and Transportation to approve our Plan to allow for immediate efforts to improve EVSE access in the Ocean State.

³⁸ <https://www.transportation.gov/civil-rights/disadvantaged-business-enterprise/definition-disadvantaged-business-enterprise>

³⁹ <https://www.federalregister.gov/documents/2022/06/22/2022-12704/national-electric-vehicle-infrastructure-formula-program>

7.1 Funding Sources

While preparing this Plan, we reviewed potential federal formulas and discretionary funds related to alternative fuel infrastructure. A full list of federal and state programs and details can be found in Appendix D. All of the programs in Table 3, except for the National Highway Performance Program, are available for planning EV charging infrastructure and related projects. All of the programs, except for the Metropolitan Planning Program, are eligible for the construction and installation of EV charging infrastructure to support operational resiliency, national energy security, environmental, and community goals for freight transportation.

Table 3: Potential Federal FHWA Funding Opportunities for Alternative Fuel Infrastructure in Rhode Island (Formula)

Federal—Formula	Available Amount for Rhode Island				
	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Surface Transportation Block Grant (STBG Funds)	\$77.1M	\$78.7M	\$80.2M	\$81.9M	\$83.5M
National Electric Vehicle Infrastructure Formula Program (NEVI Formula)*	\$3.4M	\$4.7M	\$4.7M	\$4.7M	\$4.7M
Carbon Reduction Formula Program	\$6.9M	\$7.0M	\$7.2M	\$7.3M	\$7.4M
Congestion Mitigation and Air Quality Improvement Program	\$11.4M	\$11.6M	\$11.8M	\$12.1M	\$12.3M
National Highway Performance Program	\$158.5M	\$161.7M	\$164.9M	\$168.2M	\$171.6M
National Highway Freight Program	\$7.6M	\$7.7M	\$7.9M	\$8.1M	\$8.2M
Metropolitan Planning Program	\$2.5M	\$2.5M	\$2.6M	\$2.6M	\$2.7M

*Note: Rhode Island's NEVI for FY 2022–2026 is \$22.9M; \$3.4M was apportioned in FY 2022, then a yearly average of \$4.7M will be apportioned in FY 2023–2026.

Of the federal discretionary funds, the Rebuilding American Infrastructure with Sustainability and Equity (RAISE), Infrastructure for Rebuilding America (INFRA), and Rural Surface grants are closed for 2022. However, all of the grants in Table 4, in addition to the Charging and Fueling Infrastructure Program, are available in the future for planning EV charging infrastructure and related projects and for the construction and installation of EV charging infrastructure to support operational resiliency, national energy security, environmental, and community goals for freight transportation.

Table 4: Potential Federal Discretionary Funding Opportunities for Alternative Fuel Infrastructure in Rhode Island (Discretionary)

Federal—Discretionary	Nationally Available Amount					Agency	Match Requirement
	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026		
Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	\$1.5B	\$1.5B	\$1.5B	\$1.5B	\$1.5B	FHWA	Local share: 20%
Infrastructure for Rebuilding America (INFRA)	\$1B	\$1.1B	\$1.2B	\$1.3B	\$1.4B	FHWA	Local share: 20%
Charging and Fueling Infrastructure Program	\$300M	\$400M	\$500M	\$600M	\$700M	FHWA	Local share: 20%
Low or No Emission Program (Transit)	\$1.12B	\$1.123B	\$1.125B	\$1.127B	\$1.128B	FTA	Local share: Bus (15%), Bus related facilities (10%)
Advanced Transportation Technologies and Innovative Mobility Deployment	\$60M	FY 2022–2026; \$900M in total				FHWA	
Rural Surface Transportation Grant Program	\$300M	FY 2022–2026; \$1B in total				FHWA	Local share: 20%
Alternative Fuel Corridor Grant Program	\$2.5B Total					FHWA	

In addition to federal funding sources, RIDOT plans to work with private companies, businesses, local jurisdictions, and potential sponsors for stations to provide a subsidy. Additional grants are being explored. For example, the location presented at the Community College of Rhode Island location will be paid for by RAISE grant funds.

7.2 2022 Infrastructure Deployments/Upgrades

We plan to upgrade two existing RIDOT facilities in 2022 (Table 5). First, upgrades will be made to the Ashaway Park 'n Ride facility in Hopkinton near the Connecticut border. There are currently two DCFCs and three Level 2 chargers at this location. It is near the Connecticut border, and RIDOT Park 'n Ride locations in rural areas of the Ocean State can help seasonal travelers. On the Interstate 95 corridor, this station is key to national connectivity, and Connecticut does not have an existing station near this border or near-term plans to build one. The second updated will be at the Route 117 Park 'n Ride facility in Warwick, Rhode Island. There are two DCFCs and three Level 2 chargers at this facility. We anticipate planning, outreach, design, development, construction, and maintenance spending of \$3.38 million this year to fund the program.

Table 5: 2022 Infrastructure Upgrades

Station ID	Route	Location	Anticipated EV Network	Utility Territories	Anticipated Station Ownership
165561 165635	Interstate 95	Ashaway Park 'n Ride Hopkinton	Currently ChargePoint	South County West Chase Hill Substation Feeder 49_56_155F6	Local/Municipal Government Owned (LG)
165560 181115	Interstate 95	Route 117 Park 'n Ride Warwick	Currently ChargePoint	Central RI West Drumbrock Substation 49_56_14F3	Local/Municipal Government Owned (LG)

The existing Park 'n Ride facilities were not built with EV charging in mind. Getting gas may take a few minutes, but charging an EV will require more time. With the 150-kW chargers, we expect customers to spend about 30 minutes at the location. The facilities have been equipped with lighting and have received positive reviews, but additional amenities and investment will help increase station safety and usability. Our Plan includes providing adequate ADA parking space, lighting, physical security features, restrooms, and amenities. Our contract documents will require data collection, monitoring, reporting, and reliability requirements of at least 97 percent. If the minimum is not met, RIDOT can employ a different operations and maintenance provider or impose financial repercussions on the contractor. In the initial year we will be able to provide at least four DCFCs at each location, with the option to expand based on our contingency reserve.

Based on our review of the Rhode Island Energy data and maps, the power distribution around the two proposed locations is low or very low at the local substations. As previously stated, even during the July 4th, 2022, holiday, with peak seasonal travel and electricity usage, the distribution feeders did not appear to exceed 70 percent load based on our review. RIDOT will work with Rhode Island Energy to learn more about the hosting capacity available at each site.

Figure 10 excludes the current Tesla superchargers. When accessible, these devices increase the charger density. Based on the Park 'n Ride facilities and existing fast EV charging stations at Walmart, the station density for Interstate 95 is three stations over 43.4 miles, averaging a density of approximately one station every 14 miles. The fast EV charging stations at the Route 117 location are near Cardi's Furniture, which has plans to provide EVSE. In line with the NEVI requirements, RIDOT considers it in the public's best interest to use federal funds to increase from two to four fast chargers at these two Park 'n Ride locations. Doing so will increase access near Providence and seasonal areas. RIDOT also recognizes that private build-out of infrastructure is uncertain, and funneling of public traffic to Cardi's Furniture should not be relied on if their plans change.



Figure 10: EVSE Implementation Plan Map

7.3 Upgrades of Corridor Pending Designations to Corridor Ready Designations

RIDOT and its state agency partners have discussed the benefits of proposing new corridors and determining which roadways qualify under the current guidance. At this time, RIDOT has decided not to nominate additional corridors to allow for more flexible spending to build out stations after Interstate 95 is certified by the U.S. Joint Office of Energy and Transportation. Based on our rural, regional, and through traffic patterns, focusing on large development areas or fast charging stations rather than installing stations along particular roadways will allow RIDOT to best serve its public. In addition, there are upcoming roadway projects, such as Route 146, that will impact and provide an opportunity for our land use, access to electric power, and traffic patterns.

7.4 Increases of Capacity/Redundancy along Existing AFC

Based on initial research, increasing the fast chargers by two at each station in the next year should meet the public's demand at these locations. After initial upgrades and contract requirements are in place for data collection, RIDOT will assess the current stations' usage as frequently as monthly and annually. If the power network can support the growing need, we believe larger stations with more capacity will benefit the public. With many chargers, safe spaces, and proper physical safety levels of lighting, these locations can be relied on and limit the risk of becoming obsolete by future-proofing the sites. The chosen sites also serve some seasonal traffic, and the site in Warwick may be a location to increase the capacity if seasonal traffic overwhelms the stations. In the near term, overflow may be directed to nearby locations, such as Card's Furniture.

Redundancy will be considered in the design, operation, maintenance contract documents, and station management. Although it may not be possible to provide battery backup for the fast EV charging stations at this time, RIDOT will look into lighting and security systems that can be supported during outages. Network redundancy for communication and potential network impacts are assessed site by site. In the future, as more devices help mitigate grid impacts and help increase reliability, RIDOT will evaluate installations and retrofitting in areas that are vulnerable or that have experienced reliability issues.

7.5 Electric Vehicle Freight Considerations

RIDOT will work closely with the Division of Statewide Planning for considerations for truck charging, along with local groups, to determine the near-term needs for freight charging along our corridors. As previously stated, by model year 2025, ZEV truck sales will need to be 55 percent of Class 2b to 3 truck sales, 75 percent of Class 4 to 8 truck sales, and 40 percent of truck tractor sales. The freight pathways through Rhode Island impact our network. We must now consider the impact when planning EVSE infrastructure for the Ocean State to reduce emissions and benefit the public effectively. Our Plan and data collection will work with the state plan to identify opportunities to support medium- and heavy-duty electrification. The *Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding (MoU)* signed by Rhode Island supports 100 percent ZEVs by 2035. As part of the Ocean State commitment to the MoU, this Plan supports and facilitates the successful commercialization of zero-emission medium- and heavy-duty vehicles and maximizes the use of renewable energy for ZEV charging and hydrogen fueling through interagency consultation and coordination with state public utility commissions and environmental, energy, planning, and transportation agencies, as appropriate.⁴⁰ No local EV freight fleets have been identified at this time, but RIDOT is eager to hear from any local fleet owners and operators transitioning to EVs and looking for public charging locations.

7.6 Public Transportation Considerations

Both Park 'n Ride facilities are currently on the RIPTA bus routes. RIDOT's increased access to fast charging EVSE and amenities will incentivize the public to use public transit at the Park 'n Ride facilities. There is the potential to work together further to build out these locations for the public, fleet, and employees and secure facilities to support EV operation. RIDOT will continue to work with and communicate our plans with RIPTA because their EV fleet procurement and management can benefit from passenger EVs and vice versa. The agencies are located on the same campus and can easily share lessons learned on operations, vendors, reliability, and maintenance.

7.7 FY23-26 Infrastructure Deployments

Over 5 years, there is \$22.9 million to support EVSE deployment and support through the NEVI funding program (Table 6). In addition to about \$1 million in construction costs per station, each station's operating and maintenance cost is expected to be around \$100,000 in the first year to ensure safety and reliability.

Based on the two proposed sites, reserving \$1 million per site in upgrade costs and \$250,000 per year in operating costs with a conservative estimate of 3 percent inflation, the total reserved for Interstate 95 upgrades is \$2.2 million.

If each station costs between \$500,000 and \$1,000,000 to design, construct, and install, with an additional \$100,000 annual operations and maintenance cost, this investment could yield around 8 to 14 additional chargers with a contingency reserve. We have used conservative estimates for the operations and maintenance, and the warranty may provide coverage at a much lower cost. In developing the budget items listed in Table 6, we have considered the immediate federal requirements and all of the stakeholder feedback. The market is moving; we are not the only state performing installation activity. Although our estimates were conservative, inflation is at an all-time high and we want this Plan to address the areas that need access immediately. However, we hope that the money will go further. We expect the costs to go down and requirements to shift. Our stated goals allow us to pivot and potentially expand our grant program to coastal areas. For example, if we have appropriate station density along a corridor, and allow for charging on both sides of Providence, we can move south quickly. In particular, Aquidneck Island is a current gap with a need to reduce using bridges or making long trips for fast charging. Tesla plans to install at a Target with public access, which we are focused on for coastal development. And based on the initial results of the survey, serving the coast is a common public priority.

Construction estimates for new stations range from 1 to 2 years, averaging roughly 18 months. To avoid deploying assets in areas that may be stranded or obsolete, we plan to spend these funds first to build up charging capacity in areas that can handle the electrical load and safely meet the public's needs. Table 6 provides a cost breakdown based on the market prices and our seven-pronged EV charging approach. We have set aside reserves for awareness, data collection, and workforce development. We plan to include these in our contract documents, but this additional funding will focus on added improvements in these areas. Our total investment in the workforce is anticipated to be much higher through contracting mechanisms requiring local and disadvantaged business enterprise participation.

⁴⁰ <https://www.nescaum.org/documents/mhdv-zev-mou-20220329.pdf>

Table 6: RIDOT EVSE Plan FY 2023–2026 Budget Breakdown

Item	Description	Cost	Total
Increase fast EV charging station awareness and reliability	Release RFPs to increase public awareness, smartphone applications, signage, websites, consumer groups, and tourist groups, including surveys. This contract will last 5 years to help increase consumer confidence in the network and work with the private sector with existing DCFC stations.	\$250,000 per year	\$1,250,000
Serve the Providence metropolitan area	Release RFPs from interested business owners in Providence, prioritizing the Justice40 communities, to leverage federal funds at local stations that can handle the increase in electrical load. In addition to installation and construction, RIDOT can contract operating and maintenance to ensure reliability.	If each smaller station location awarded is \$500K–\$1M in capital cost, and \$100K in operating and maintenance support, this would result in about 7–14 new stations.	\$8,250,000
Upgrade two existing fast chargers at Park 'n Ride facilities along Interstate 95	Release RFPs for upgrading the existing facilities, including ADA, cybersecurity, and physical security requirements, at the two Park 'n Ride facilities. The contract documents will include operations and maintenance support. Note that the RFPs will be funded using our first-year funding of \$3.8M. There are two existing DCFCs, and we will meet or exceed the requirement of four DCFCs for each Park 'n Ride.	\$1M for planning and construction of each location \$100K for larger station annual operations and maintenance cost of each location plus \$1.6M reserve	\$3,800,000
Work with Planning on EVSE near Route 146	Work with RIDOT Planning and reserve funds for Route 146 EV charger construction, operations, and maintenance in the future. In the near term, identify local partners and release RFPs partnering with private companies to increase access to EV charging.	\$2,000,000 reserve	\$2,000,000
Data collection and analysis	Assess the monthly and annual data collected from the fast EV charging stations and ensure that all data are available in an easily digestible format and publicly available to make policy and planning decisions. A consultant is anticipated to help RIDOT with data collection, management, and reporting. Resources are allocated to purchase new data and analyze data.	\$500,000	\$500,000
Workforce development	RIDOT will invest in a consultant to work with local universities, community colleges, and technical groups feeding into the local market. Our Contracts will foster competitive grants to increase local participation, especially for disadvantaged business enterprises.	\$500,000	\$500,000
Support Coastal Development and Contingency Reserve	Release RFPs for DCFCs within 1 mile of National Highway System roadways, including ADA, cybersecurity, and physical security requirements. The contract documents will include operations and maintenance support.	\$1M for planning and construction of each location \$100K for larger station annual operations and maintenance cost of each location plus \$2.6M reserve	\$6,600,000
Total			\$22,900,000

Based on previous stakeholder feedback and guidance to focus on the National Highway System, Figure 11 summarizes the major roadways besides Interstate 95 for future consideration. These areas and public needs will be considered when evaluating all submitted RFPs. The Providence metropolitan area is a top priority moving forward. Most Ocean State residents considering purchasing an EV without the ability to charge at their rental or multi-unit dwelling will rely on safe, publicly available fast EV charging stations. We anticipate needing charging along the journey once they arrive in the Ocean State. Owners of Airbnb locations, bed-and-breakfasts, or rentals may not plan to install the infrastructure to accommodate charging. Coastal vacation destinations along southern routes are a priority as well. The plan is to evaluate new EVSE sites and proposed site upgrades in the RFPs in a data-driven and collaborative process, delivering the most benefits to the public. Our department has access to national data sets and local resources that help guide the ranking process. In the future, we are looking to purchase additional

data such as StreetLight data to assess local dwell times and travel patterns for more granular impacts if necessary. Our numerical assessment will result in an icon summary showing the major impact areas as shown on Figure 11. Decisions can be made by assessing multiple objectives, as illustrated on Figure 11, to measure deployment benefits if multiple business owners are applying for the same funds or agencies are split on deployment priorities.

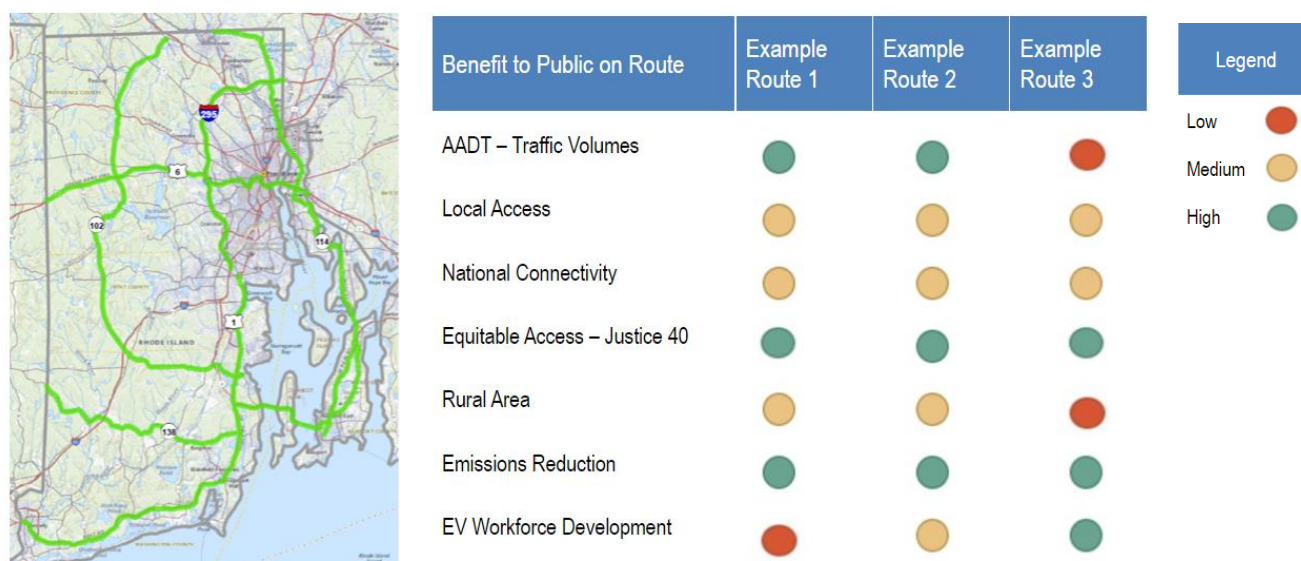


Figure 11: RIDOT Future Deployment Areas and Criteria

At the time of developing this Plan, there was limited guidance on measuring benefits to Justice40 communities, and additional federal guidance is expected in workforce development and emerging areas. We are comfortable with committing to measuring the benefit, and our Plan needs to be data-driven and supported by the U.S. Joint Office of Energy and Transportation (Section 10). In the meantime, we are researching and working with our agencies, data collection, and performance groups to assess what data are already available.

In addition to the previous criteria, sites will be assessed based on the following criteria:

- Excess grid capacity, reliability, accessibility, safety, permitting, and potential solar or clean energy options
- Constructability, environmental impact, and terrain-related issues
- Inclusion of restrooms, or proximity to restrooms, small businesses, dog parks, and other amenities and seasonal attractions
- Accessibility for maintenance, snow removal, and operation to avoid stranded assets
- Any new or impacted related subnational EV charging infrastructure programs and incentives
- Partnership opportunities with public-private or private investment in EV charging infrastructure
- Existing market expectations for power levels, charging speeds, and future-proofed station design allowing maximum flexibility for future upgrades
- Location concerning evacuation routes and impact on resiliency
- Additional consumer protection and cybersecurity considerations

7.8 State, Regional, and Local Policy

RIDOT is committed to meeting and working with state, regional, and local policy constituents on the use, installation, maintenance, and operation of EV infrastructure. To promote use, education outreach and policy for informing drivers with signage and communication through targeted channels will help connect the public to the available stations.

RIDOT will work with contractors, consultants, and third-party entities to coordinate municipalities on zoning and to permit and work with utilities. For Park 'n Ride facilities, RIDOT will ensure proper local outreach and approval before upgrading existing stations. This includes discussing the power requirements, public safety considerations such as lighting and bollards, bathrooms, and ADA requirements.

In addition, RIDOT is committed to providing the best price per energy unit available to the public. RIDOT will require this in the contract documents and perform market research on the current rates being offered. Where RIDOT impacts the demand charge,

RIDOT will explore demand charge mitigation, such as time of use rates. This Plan and future strategies will be consistent with State, regional, and local policies.

Currently, the Rhode Island gas tax is \$0.34 per gallon. This helps fund RIPTA and RIDOT. In the future, if there is an EV charger user taxation, RIDOT will follow all rules and State regulations. The current rate breakdown, and any taxes that are included, will be presented to the public on the RIDOT EV Charging Stations webpage, signage, and mobile applications. To help break the barrier for renters, RIDOT can help explore zoning changes to support EV charging in single- and multi-family dwellings. There may be “bonuses” or incentives that officials can help offer to promote adoption as more stations come online. We want to assess these as long-term strategies with impacts, even if the action may be shorter term and adjusted based on actual effect.

8. Implementation

RIDOT strategies for implementation and spending USDOT apportionment of Highway Infrastructure Program funds are summarized in this section. As a public agency, we have experience releasing competitive contracts with clear Civil Rights Act requirements, reliability, and performance specifications. The EV market is growing, as a result of demand that splits from our typical role. To serve the public without becoming an energy provider, we are looking at new strategies to implement the funds creatively and practically. This includes working with interested private businesses, networks, and emerging technologies solutions.

8.1 Strategies for EVSE Operations & Maintenance

Our Plan reserves a budget for every station’s operations and maintenance expenditures. RIDOT is open to strategies that weigh the risk and reward for external versus internal employees performing maintenance of the devices. Currently, RIDOT uses a contractor to service roadside devices such as cameras, message board signs, field devices, associated commutations, and power infrastructure. The contracts released by RIDOT operations and maintenance contracts encourage local workforce participation. In the event of a grant application for operations and maintenance, the recipient will have contractual obligations to ensure station performance, data reporting for usage, uptime, and user satisfaction and to enforce idling fees.

8.2 Strategies for Identifying Electric Vehicle Charger Service Providers and Station Owners

A little over a third of our federal budget is reserved to support EV stations around Providence to serve Rhode Islanders. We have heard from the local convenience stores and plan to invite the group to the table to discuss practical next steps in meeting NEVI requirements under RIDOT contract documents. We are also communicating with local interested business owners and entities to increase EVSE devices. RIDOT is open to strategies to help identify EV charger service providers and station owners. In the near term, RIDOT plans to release RFPs to solicit interested parties for site hosts, owners, and/or operators for projects.

8.3 Strategies for EVSE Data Collection & Sharing

Our Plan reserves \$500,000 to hire internal and external consultants and purchase data if necessary. Rhode Island’s strategies combine listening to public priorities with data-driven solutions. Data collection and sharing are paramount to optimizing investment, and sharing information among agencies allows us to react to public needs. RIDOT will work with the U.S. Joint Office of Energy and Transportation to ensure our contracts require a data management plan that satisfies the NEVI requirements and specifications. At a minimum, RIDOT will require the following data to be available in real time:

- Location
- Status
- Connector types and availability, including ADA information for ports
- Power level
- Reliability
- Pricing (\$/mi, \$/kWh, or \$/min)

RIDOT will ensure that the data collected from the program are available to the public, consultants, operators, potential partners, and policymakers to continue identifying policy positions to barriers to installing fast chargers.

8.4 Strategies to Address Resilience, Emergency Evacuation, Snow Removal/Seasonal Needs

Seasonal and coastal areas in Rhode Island are experiencing more frequent and intense storms, impacting water levels and power availability. While planning to support evacuation routes and seasonal communities, the locations of the EVSE devices will

be as resilient as possible to natural and human elements. The fast EV charging stations will be essential resources, and the State will need to include alternative fuel vehicles and EV infrastructure in its emergency response and preparedness plan. In line with our Rhode Island Statewide Climate Resilience Action Strategy, microgrids may provide some critical station infrastructure backup. In the future, when more emerging technologies are available, battery backup systems and solar and bi-directional charging capabilities may impact our strategies and improve the infrastructure response during extreme weather conditions. RIDOT evacuation routes and flooding plains need to be considered. Snow removal from fast EV charging stations will be included as a requirement for RIDOT contracts to operate and maintain the EV infrastructure.

8.5 Strategies to Promote Strong Labor, Safety, Training, and Installation Standards

We have reserved \$500,000 to invest in local EV workforce development. RIDOT shall meet or exceed the FHWA minimum standards that address NEVI infrastructure workforce certification and safety requirements. In addition, RIDOT will ensure that vendors selected under this Plan will focus on safety in all aspects of station development, installation, and maintenance. RIDOT will work with local groups and universities to promote training and employment opportunities. RIDOT also includes background, training, and certification criteria for vendor evaluation in the solicitation process.

9. Civil Rights

This Plan will be implemented utilizing all proposed planning guidelines and recommendations for deployment. This will extend to any entity, contractor, or group participating in these funds after Plan approval. No person on the grounds of race, color, national origin, sex, age, disability, low income, or limited English proficiency, as provided by Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987, will be excluded from, denied the benefits of, or be otherwise subjected to discrimination under this Program and Plan. This will be according to all federal, State, and local regulations and statutes to ensure compliance with State and federal civil rights laws, including Title VI of the Civil Rights Act and accompanying USDOT regulations, the ADA Section 504 of the Rehabilitation Act.

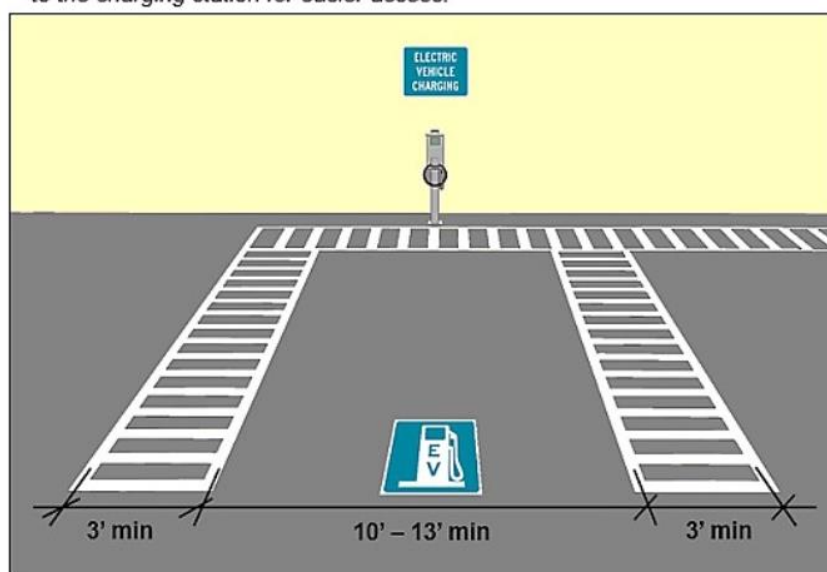
All contract documents will require compliance with the Civil Rights Act and ADA. The site ADA requirements shall follow the U.S. Access Board recommendation for EV Accessibility Standards, with a 10- to 13-foot minimum for the space and 3 feet on each side (Figure 12).⁴¹

⁴¹ <https://www.access-board.gov/ada/guides/chapter-5-parking/#electric-vehicle-charging-stations>

Accessible EV Charging Stations

Accessible Route

Provide an accessible route on both sides of the vehicle space that connects to the charging station for easier access.



Vehicle Space

A vehicle space at least 10' – 13' wide is advisable. A 10' width offers an extra 2' that effectively provides a 5' aisle on one side when paired with the accessible route; a 13' wide space will allow an 8' aisle. This flexibility is helpful since the parking direction is determined by the location of the charging station and the vehicle connection. Use the International Symbol of Accessibility only where spaces are reserved exclusively for people with disabilities.

Figure 12: ADA Accessibility Standard Graphic S208.2

10. Equity Considerations

Unequal benefits from the transportation and energy systems have prevented disadvantaged communities and businesses belonging to members of those communities from equitably enjoying the benefits of investments. Equity is considered through RIDOT's Plan to address burdens from transportation and energy systems, which have been disproportionately borne by disadvantaged communities. The Plan will be used to support objectives identified in the February 10, 2022, Memorandum on National Electric Vehicle Infrastructure (NEVI) Formula Program Guidance⁴² and Executive Order 14008: Tackling the Climate Crisis at Home and Abroad, establishing the Justice40 initiative, and will target at least 40 percent of the benefit of program spending toward disadvantaged communities (DACs). This analysis also considers State-recognized Rhode Island Enterprise zones, which are transportation infrastructure designations based on several distress criteria, including poverty, unemployment, and median household and per capita incomes.⁴³ We have overlapped the federal Justice40 communities with the statewide Enterprise zones to identify overlap in the results and gaps between the two assessments (Figure 13). Most Justice40 communities are in the northern portion of the state, around the Providence metropolitan area, including one in Bristol County. Most Justice40 communities also travel along the Interstate 95 corridor, our AFC roadway. Increasing access to these corridors and areas provides benefits improving air quality and public health and eliminating the barrier to EV charging.

⁴² https://www.convenience.org/Media/Daily/2022/Feb/11/1-WhiteHouse-Release-5-Billion-Plan-EV-Charging_GR/90d_nevi_formula_program_guidance_Feb2022.pdf

⁴³ <https://www.rigis.org/datasets/enterprise-zones/explore?location=41.777380%2C-71.336181%2C10.64>

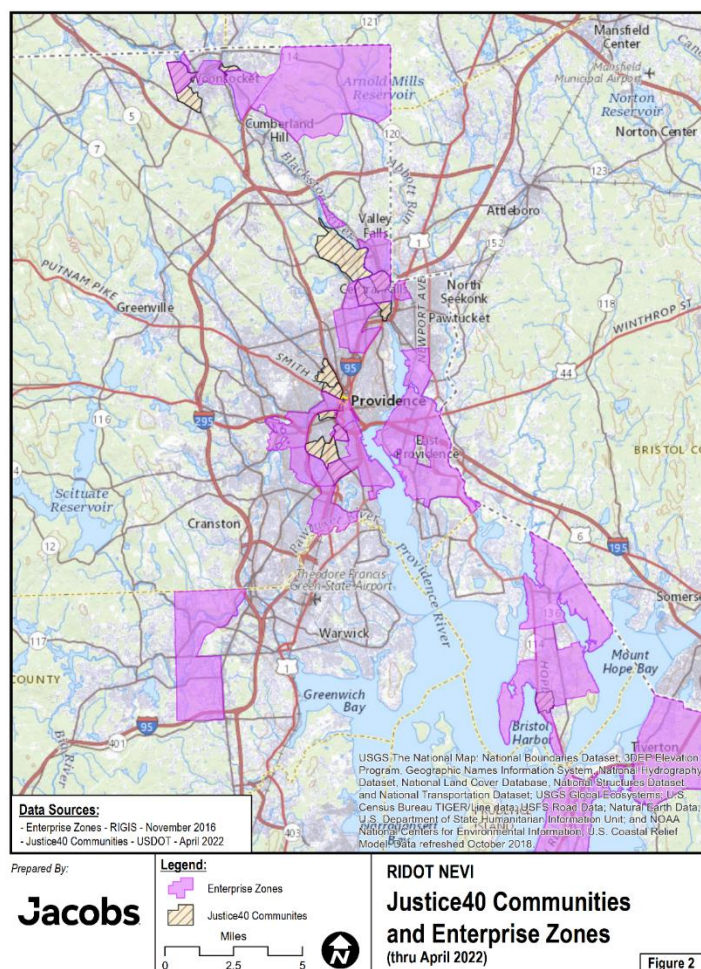


Figure 13: Rhode Island Justice40 Communities and Enterprise Zones

10.1 Identification and Outreach to Disadvantaged Communities (DACs) in the State

Through their respective Equity Action Plans, DOE, USDOT, and the U.S. Environmental Protection Agency (EPA) have prioritized the following:

- Expanding access
- Data integrity
- Wealth creation
- Power of community
- Stakeholder engagement
- Interventions

Table 7 summarizes the Justice40 considerations, the relevant Rhode Island stakeholder groups, and engagement tactics to reach disadvantaged communities. “Justice40 Considerations” are the listed priorities that we should consider. “RI Relevant Stakeholders Groups” are based on the categories previously established in the NEVI Stakeholder List 2022-04-25 spreadsheet. “Engagement Tactics” are various tactics that can be used to meet the listed priorities while engaging the stakeholders. These were generated based on Rhode Island’s unique needs based on the Bipartisan Infrastructure Law and the EPA Equity Action Plan.

Table 7: Equitable Engagement Considerations

Justice40 Considerations	RI Relevant Stakeholders Groups	Engagement Tactics
Bipartisan Infrastructure Law		
Underserved Communities	Community-Based Organization	Identify and survey need
	Regional Organization	
	Public and Quasi-Public Agencies	Public outreach
Clean Drinking Water	N/A	N/A
High-Speed Internet	N/A	N/A
Environmental Justice	Community-Based Organization	Be intentional and inclusive with awareness and education
	Native American Tribe	
Zero Emissions	Public and Quasi-Public Agencies	Technical assistance, policy analysis, and strategic communications and outreach
	Regional Organizations	Develop reporting tools and protocols
		Evaluate cost-effective technologies and strategies for reduction Explore any mitigation opportunities
Workforce Development	Department of Commerce	Seasonal hires opportunities Campaign for awareness for travelers through vacation homes and hotel industry
	Public and Quasi-Public Agencies	
	Private-Sector Operator	Job vacancy listing
	RIDOT	Host virtual rooms/virtual open houses Multilingual presentations Dedicated email and hotline, etc.
Environmental Protection Agency (Action Plan)		
Civil Rights	RIDOT	Ensure applicability
Enforcement	Federal Agency	Engage elected officials, as well as relevant government agencies for input, support, and advocacy and to address challenges
		Target newly appointed representatives and leadership Provide regular updates, talking points and messaging
Operationalization	Federal Agency	Advance alert system or warnings for road travelers (i.e., AM radio station)
	Regional Organizations	Multifunctional access such as fast EV charging stations and scooters/electric bikes
Environmental Justice	Community-Based Organizations	Host virtual rooms/virtual open houses
	RIDOT	Multilingual presentations Dedicated email and hotline, etc.

Justice40 Considerations	RI Relevant Stakeholders Groups	Engagement Tactics
<u>Department of Transportation (Equity Action Plan)</u>		
Wealth Creation	Quasi-Public Agency	<p>Identify small and disadvantaged business enterprises to provide services pre, during, and post</p> <p>Seek firm with long-term maintenance of facilities (i.e. Janitorial or landscape services)</p>
	Regional Organizations	Ability to add convenience stores or smaller franchises similar to gas stations or rest stops to aid in producing additional jobs
Power of Community	Community-Based Organizations	<p>Engage and inform the public using available and appropriate social media</p> <p>Measure engagement with available analytic tools</p>
Interventions	Regional Organizations	Training and awareness
	Public and Quasi-Public Agencies	
Expanding Access	Regional Organizations	Design and produce materials for electronic and physical distribution to various stakeholders and other interested parties (i.e., press kits, handouts, graphics, etc.)
	RIDOT	<p>Host virtual rooms/virtual open houses</p> <p>Multilingual presentations</p> <p>Dedicated email and hotline, etc.</p>
<u>Department of Energy (Equity Action Plan)</u>		
Data	Regional Organizations	<p>Host virtual rooms/virtual open houses</p> <p>Multilingual presentations</p> <p>Dedicated email and hotline, etc.</p> <p>Assess any gaps from prior studies and facilitate data-informed decision-making</p>
New Applicant Opportunities	Regional Organizations	<p>Provide multilingual applications</p> <p>Post any employment opportunities on various portals</p>
Increase in R&D Funding	Public and Quasi-Public Agencies	Education for capacity building
Tribal & Stakeholder Engagement	Native American Tribes	Pursue speaking engagements for project and agency leadership to further publicize the study
Weatherization	N/A	N/A

10.2 Process to Identify, Quantify, and Measure Benefits to DACs

The project team considered important factors of EVSE deployment that support equitable distribution of benefits informed both by Executive Order 14008 and NEVI guidance, including primarily the following areas:

- Health
- Environmental exposures
- Economic
- Participation
- Energy cost burden
- Capital
- Workforce development
- Energy resilience
- Displacement

For the first year of the Plan, the project team considered the following place-based benefits particularly:

- Percentage of EV charging infrastructure in DACs
- Income characteristics of travelers to proposed locations of EV charging infrastructure

A main focus of the first year of the Plan is to bring the AFCs in Rhode Island into compliance. As those corridors are adequately served, it will become increasingly critical to identify benefits to DACs through this Plan, addressed in the next section.

10.3 Benefits to DACs through this Plan

One of the key benefits of directing benefit to disproportionately affected communities is direct spending in those communities. However, direct spending does not necessarily consider important indirect benefits. The Plan seeks to center overburdened and underfunded communities in the clean energy transition. RIDOT is committed to working with these communities throughout the planning process to define benefits and desired outcomes of the NEVI funding. The project team's approach to capturing these benefits emphasizes a flexible approach that enables the project team to quantify benefits in the short run, but continue to refine an approach to measurement over time. As this Plan is updated and more data are made available, these strategies and their measurement will be revisited. Community engagement will further refine these strategies.

- Benefits Measurement for DACs
 - Number 1: Prioritize direct benefits to DACs
 - Objective: Direct 40 percent of spending to DACs.
 - Data: Estimate future spending in DACs, previous year's spending in DACs (years 2 to 5).
 - Number 2: Prioritize workforce development opportunities within DACs and by DAC members
 - Objective: Increase recruitment to DACs, prioritize equitable investments within DACs
 - Data: Qualitative discussion of activities by various agencies on increasing outreach to DACs
 - Number 3: Measure indirect benefits
 - Objective: Strengthen measurement techniques to capture indirect benefits to DACs.
 - Data: Tracts located in nonattainment areas that have overlap with DACs
 - Data: Tracts that receive many / high-mileage trips from DACs
 - Number 4: Gather, through stakeholder outreach, measuring benefits, feedback on current incentives, within-community considerations for citing stations, displacement practices, and other topics.
 - Objective: Continue stakeholder engagement and outreach
 - Data: Summary of comments from stakeholders

11. Labor and Workforce Considerations

Rhode Island is committed to leveraging federal investment to grow the local workforce by fostering training programs focusing on reliability, performance, experience, and diversity in the workforce to maintain the EVSE infrastructure. We understand this is a growing field that needs installers, maintenance technicians, electrical workers, and personnel to serve the industry. When contracting work to outside entities, RIDOT is committed to ensuring proper staffing, workforce diversity, local registrations, and training requirements as outlined in the NEVI guidance. In addition, our qualification-based contracting process will require certain levels of education, years of experience, and certifications. As stated in Section 5, RIDOT will provide opportunities to contract with disadvantaged business enterprises and women-owned business enterprises as prime contractors or subcontractors. In addition to the contracting mechanism, RIDOT will explore a value-based procurement strategy and include Justice40 impact as a critical scoring mechanism.

In the future, RIDOT will explore opportunities to work with the Rhode Island Department of Labor and Training, local community colleges, technical groups, colleges, and universities to help develop training programs to respond to these work opportunities. We will also explore grant applications to maximize community residents' and stakeholders' local workforce engagement.

12. Cybersecurity

The network connectivity and safety of the fast EV charging station infrastructure need to be considered from a cybersecurity perspective. Safety is always RIDOT's top priority. In 2019, Rhode Island State published a Cybersecurity Strategy.⁴⁴ While EVs and fast EV charging stations are not mentioned explicitly, this Plan aligns with the requirements and approach to countering threats. RIDOT shall follow the FHWA outline for network connectivity requirements for charger-to-charger network communication, charging network-to-charging network communication, and charging network-to-grid communication. Our standard requirements will include secure remote monitoring, diagnostics, control, and updates. Proposed network connectivity requirements also would specifically require chargers to be capable of a smart charge management and Plug and Charge capabilities by requiring the ability to communicate through Open Charge Point Protocol (OCPP) in tandem with ISO 15118.

RIDOT agrees these requirements would help address cybersecurity concerns while mitigating stranded assets. At a minimum, the devices will meet the following cyber security requirements:

- OCPP1.6 (2.0 preferred)
- UL certified
- Wi-Fi or cellular networking
- Ability to be controlled remotely
- Open ADR 2.0b (or current IEEE 1547)
- Payment Card Industry Data Security Standards in compliance with ISO 15118 to accept payment
- California Senate Bill 327 for Security of Connected Devices

This public service will require a completely different set of deliverables and controls to maintain safety and security for this collaborative ecosystem. This solution must have some key attributes:

1. Maintain competing requirements of both safety and confidentiality
2. Deliver a cost-effective and durable product
3. Allow access and provide services to diverse economic and identity groups
4. Resiliency for power, access, physical, and cybersecurity

Many communities do not have established cybersecurity policies. Cybersecurity expenses can be provided through a base rate allocation, meaning that existing rates cover expenses.

13. Program Evaluation

RIDOT will monitor and report the progress of the overall statewide EVSE AFC network and update this Plan at least annually to address opportunities for improvement. These updates will occur during and after build-out. To monitor the program, we will ensure performance and contract management to measure contract success and the EV charging network. RIDOT has existing performance measures and data sources we will leverage to the best of our ability to determine a baseline.

To evaluate the success of the outreach of the program and this Plan, RIDOT plans to utilize resources to obtain a contractor to monitor, assess and report each month on the current status of the station and near-term action items delegated from our core working group. Flexibility, data, and stakeholder feedback will be critical in responding to market and public needs changes. As the program matures, the reporting may move to quarterly instead of monthly. Annually, the data will be compiled for assessment and reporting.

The goals in the near term are presented in Section 4. RIDOT's goal in the next 5 years is to fully build out Interstate 95 and build two additional stations, meeting the NEVI requirements and providing 97 percent reliability.

In Table 8, we have included our overall goals with our infrastructure deployment's short- and long-term action items. More information on the short term actions is available in Section 7. Longer term, to measure our Plan's effectiveness in meeting its goals, each one has been listed in Table 8, including actions, performance indicators, and potential performance measures and marks. Please note that some of these are ambitious future targets.

⁴⁴ <https://admin.ri.gov/sites/g/files/xkqbur536/files/documents/Reports/cybersecurity/RI-Cybersecurity-Strategy-2019.pdf>

Table 8: Future Program Evaluation and Potential Targets

Goal	Action	Target
Improve Local Access	- Increase fast EV charging station awareness and reliability - Serve the Providence metropolitan area - Support Coastal Development and Contingency Reserve	- Every station reporting at least 98% reliability
Deliver National Connectivity	- Upgrade two existing facilities Park 'n Ride facilities along Interstate 95 -Work with Planning on EVSE near Route 146 - Support Coastal Development and Contingency Reserve	- Average EVSE DCFC station density of 1 every 10 miles
Focus on Justice40	- Serve the Providence metropolitan area - Workforce development - Support Coastal Development and Contingency Reserve	- At least 40% of overall spending is directed to DACs - 50% of program benefits delivered to Justice40 communities - Over 50% positive Summary of comments from stakeholders
Aid Rural Areas	- Increase fast EV charging station awareness and reliability - Release contract to build two DCFC stations in the rural areas in the long term or with contingency reserves	- Two NEVI Compliant DCFC public charging stations in rural communities
EV Workforce Development	- Workforce development to engage local contractors, local universities, and tech organizations	-Hire 100% local employees to maintain fast EV charging stations
Reduce Emissions	- Increase fast EV charging station awareness and reliability - Serve the Providence metropolitan area - Upgrade two existing Park 'n Ride EVSE facilities along Interstate 95 -Work with Planning on EVSE near Route 146 - Help grant programs and support additional mandates for EV purchasing - Support Coastal Development and Contingency Reserve	- 43,000 ZEVs on the roadway by 2025 as set by Governor MoU
Coastal Urban Development and Support	- Support Coastal Development and Contingency Reserve	- Around four NEVI Compliant DCFC public charging stations in coastal communities Jamestown and/or Aquidneck Islands

In addition to internal measures and overall network impact, RIDOT is committed to collecting and reporting the FHWA Notice of Proposed Rule Making metrics in the future, including:

- Climate goals
 - Tracking EV adoption
 - Possible measurements include EV sales, EV registrations, statewide charging hours
 - Approximating greenhouse gas reduction attributed to EV use
 - Localized air quality monitoring
- Promoting equity
 - Demographics of EV registrations, EV sales, and fast EV charging station users based on surveys
 - EVSE education
 - Drive Change. Drive Electric Campaign is already doing this. If this campaign is continued, reach could be amplified across state agencies' outreach efforts.
 - Possible measurements include developing and tracking hits on an informational website, general surveys.
 - Air quality impacts in DAC
- Diversifying the economy
 - Surveys of business owners within 1 mile of new stations
 - Contractor training programs and employment requirements/data tracking tied to new infrastructure construction contracts
 - Employment and training partnerships with energy providers
- OEM surveys
 - Infrastructure implementation strategy
 - New/improved station usage

- Maintenance surveys
- Host location surveys
- In-person surveys of new station users

14. Discretionary Exceptions

At this time, Rhode Island has not identified the need for any requested exceptions from the requirement that charging infrastructure is installed every 50 miles along the state's portion of the Interstate Highway System within 1 travel mile of the interstate.

Appendix A. Public Survey – Active July 11, 2022

<https://publicinput.com/H8140>

Appendix B. Feedback and Recommendations Received as of July 29, 2022

Appendix C. Full List of EV Charging Stations (DCFC, Level 2) as of June 8, 2022⁴⁵

Station ID	Street Address	City	Type	No. of Connectors	EV Network
49706	845 Taunton Ave	East Providence	DC Fast, Level 2	2	Non-Networked
49708	295 E Main Rd	Middletown	DC Fast, Level 2	2	Non-Networked
42016	1041 Eddie Dowling Hwy	North Smithfield	DC Fast, Level 2	2	Non-Networked
49711	885 Quaker Ln	West Warwick	DC Fast, Level 2	2	Non-Networked
165289	283 County Rd	Barrington	DC Fast	1	ChargePoint Network
181041	283 County Rd	Barrington	DC Fast	1	ChargePoint Network
72476	151 Sockanosset Cross Rd	Cranston	DC Fast	1	ChargePoint Network
198359	2611 S County Trl	East Greenwich	DC Fast	1	EVgo Network
204944	435 Nooseneck Hill Rd	Exeter	DC Fast	1	ChargePoint Network
165561	0 NOOSENECK-HILL	Hopkinton	DC Fast	1	ChargePoint Network
165635	0 Nooseneck Hill Rd.	Hopkinton	DC Fast	1	ChargePoint Network
189580	94 George Waterman Rd	Johnston	DC Fast	1	ChargePoint Network
189581	94 George Waterman Rd	Johnston	DC Fast	1	ChargePoint Network
197848	100 Twin River Road	Lincoln	DC Fast	1	ChargePoint Network
197895	100 Twin River Road	Lincoln	DC Fast	1	ChargePoint Network
195726	9 Commerce Dr	Middletown	DC Fast	1	ChargePoint Network
192734	1001 Roosevelt Ave	Pawtucket	DC Fast	1	ChargePoint Network
192735	1001 Roosevelt Ave	Pawtucket	DC Fast	1	ChargePoint Network
217373	1001 Roosevelt Ave	Pawtucket	DC Fast	1	ChargePoint Network
198373	220 India St	Providence	DC Fast	1	EVgo Network
202687	333 Smith St.	Providence	DC Fast	1	ChargePoint Network
85922	1515 Bald Hill Rd	Warwick	DC Fast	1	ChargePoint Network
165228	35 Albany Rd	Warwick	DC Fast	1	ChargePoint Network
165560	Rt117 park and ride	Warwick	DC Fast	1	ChargePoint Network
172279	1515 Bald Hill Rd	Warwick	DC Fast	1	ChargePoint Network
181115	Rt 117 Park&Ride	Warwick	DC Fast	1	ChargePoint Network
167864	51 Silver Spring Street	Providence	DC Fast	4	Electrify America
115510	41 Mary St	Newport	Level 2	1	Tesla Destination
42888	1350 Post Rd	Warwick	Level 2	1	Non-Networked
104757	360 Lincoln Ave	Warwick	Level 2	1	ChargePoint Network
173565	360 Lincoln Ave	Warwick	Level 2	1	ChargePoint Network
173566	360 Lincoln Ave	Warwick	Level 2	1	ChargePoint Network
173567	360 Lincoln Ave	Warwick	Level 2	1	ChargePoint Network
173568	360 Lincoln Ave	Warwick	Level 2	1	ChargePoint Network
173569	360 Lincoln Ave	Warwick	Level 2	1	ChargePoint Network
220713	132 Atlantic Ave	Westerly	Level 2	1	Tesla Destination
166900	90 County Rd	Barrington	Level 2	2	ChargePoint Network

⁴⁵ <https://afdc.energy.gov/stations#/analyze?region=US-RI&country=US>

Station ID	Street Address	City	Type	No. of Connectors	EV Network
181298	90 County Rd	Barrington	Level 2	2	ChargePoint Network
87570	1 Ferry Rd	Bristol	Level 2	2	ChargePoint Network
103499	480 Metacom Ave	Bristol	Level 2	2	ChargePoint Network
166237	1 Colt Dr	Bristol	Level 2	2	ChargePoint Network
53460	84 Inman Rd	Burrillville	Level 2	2	ChargePoint Network
104396	75 Eastern Ave	Burrillville	Level 2	2	ChargePoint Network
104506	240 Harrisville Main St	Burrillville	Level 2	2	ChargePoint Network
173518	75 Eastern Ave	Burrillville	Level 2	2	ChargePoint Network
173534	240 Harrisville Main St	Burrillville	Level 2	2	ChargePoint Network
98858	75 Burlingame State Park Rd	Charlestown	Level 2	2	ChargePoint Network
196247	900 Tiogue Ave	Coventry	Level 2	2	Volta
219763	2405 Nooseneck Hill Rd	Coventry	Level 2	2	ChargePoint Network
98879	93 Midway Rd	Cranston	Level 2	2	ChargePoint Network
144509	1341 Elmwood Ave	Cranston	Level 2	2	ChargePoint Network
155493	50 Independence Way	Cranston	Level 2	2	ChargePoint Network
165084	14 W Rd	Cranston	Level 2	2	ChargePoint Network
173254	93 Midway Rd	Cranston	Level 2	2	ChargePoint Network
175561	50 Independence Way	Cranston	Level 2	2	ChargePoint Network
180973	14 W Rd	Cranston	Level 2	2	ChargePoint Network
196214	315 Harborside Blvd	Cranston	Level 2	2	ChargePoint Network
196215	315 Harborside Blvd	Cranston	Level 2	2	ChargePoint Network
205023	30 Martin St	Cumberland	Level 2	2	ChargePoint Network
205211	30 Martin St	Cumberland	Level 2	2	ChargePoint Network
205716	30 Martin St	Cumberland	Level 2	2	ChargePoint Network
205954	30 Martin St	Cumberland	Level 2	2	ChargePoint Network
149138	111 Peirce St	East Greenwich	Level 2	2	ChargePoint Network
174678	111 Peirce St	East Greenwich	Level 2	2	ChargePoint Network
52591	50 Highland Ave	East Providence	Level 2	2	ChargePoint Network
52816	430 Newport Ave	East Providence	Level 2	2	ChargePoint Network
53042	1011 Veterans Memorial Pkwy	East Providence	Level 2	2	ChargePoint Network
122762	159 Squantum Rd	East Providence	Level 2	2	ChargePoint Network
122763	89 Squantum Rd	East Providence	Level 2	2	ChargePoint Network
191379	20 Newman Ave	East Providence	Level 2	2	ChargePoint Network
191380	27 Newman Ave	East Providence	Level 2	2	ChargePoint Network
207438	2000 Pawtucket Ave. East Providence High School	East Providence	Level 2	2	ChargePoint Network
207439	2000 Pawtucket Ave. East Providence High School	East Providence	Level 2	2	ChargePoint Network
213958	3 Dexter Rd	East Providence	Level 2	2	ChargePoint Network
213959	3 Dexter Rd	East Providence	Level 2	2	ChargePoint Network
99318	151 Pulaski Rd	Glocester	Level 2	2	ChargePoint Network

Station ID	Street Address	City	Type	No. of Connectors	EV Network
181116	0 NOOSENECK-HILL	Hopkinton	Level 2	2	ChargePoint Network
181117	0 NOOSENECK-HILL	Hopkinton	Level 2	2	ChargePoint Network
181118	0 NOOSENECK-HILL	Hopkinton	Level 2	2	ChargePoint Network
143193	10 Memorial Avenue	Johnston	Level 2	2	ChargePoint Network
143200	345 Cherry Hill Rd	Johnston	Level 2	2	ChargePoint Network
147550	1301 Atwood Ave	Johnston	Level 2	2	ChargePoint Network
174186	10 Memorial Avenue	Johnston	Level 2	2	ChargePoint Network
174188	345 Cherry Hill Rd	Johnston	Level 2	2	ChargePoint Network
174653	1301 Atwood Ave	Johnston	Level 2	2	ChargePoint Network
174654	1301 Atwood Ave	Johnston	Level 2	2	ChargePoint Network
174655	1301 Atwood Ave	Johnston	Level 2	2	ChargePoint Network
174656	1301 Atwood Ave	Johnston	Level 2	2	ChargePoint Network
201018	5 East Alumni Ave.	Kingston	Level 2	2	ChargePoint Network
196561	35 Campus Ave.	Kingstown	Level 2	2	ChargePoint Network
196562	36 West Alumni Ave	Kingstown	Level 2	2	ChargePoint Network
196563	36 West Alumni Ave	Kingstown	Level 2	2	ChargePoint Network
52818	622 George Washington Hwy	Lincoln	Level 2	2	ChargePoint Network
117186	3 I-295	Lincoln	Level 2	2	ChargePoint Network
197891	100 Twin River Road	Lincoln	Level 2	2	ChargePoint Network
197892	100 Twin River Road	Lincoln	Level 2	2	ChargePoint Network
197893	100 Twin River Road	Lincoln	Level 2	2	ChargePoint Network
197894	100 Twin River Road	Lincoln	Level 2	2	ChargePoint Network
98853	17 Elizabeth Ln	Middletown	Level 2	2	ChargePoint Network
146793	700 W Main Rd	Middletown	Level 2	2	ChargePoint Network
147221	350 E Main Rd	Middletown	Level 2	2	ChargePoint Network
174533	700 W Main Rd	Middletown	Level 2	2	ChargePoint Network
174574	350 E Main Rd	Middletown	Level 2	2	ChargePoint Network
206769	93 Miantonomi Ave	Middletown	Level 2	2	ChargePoint Network
206770	93 Miantonomi Ave	Middletown	Level 2	2	ChargePoint Network
52819	870 Ocean Rd	Narragansett	Level 2	2	ChargePoint Network
98825	Salty Acres Dr	Narragansett	Level 2	2	ChargePoint Network
98852	254 Great Island Rd	Narragansett	Level 2	2	ChargePoint Network
218079	91 Point Judith Rd	Narragansett	Level 2	2	Volta
98854	85 Fort Adams Dr	Newport	Level 2	2	ChargePoint Network
98856	13 Powel Ave	Newport	Level 2	2	ChargePoint Network
98857	59 Brown and Howard Wharf	Newport	Level 2	2	ChargePoint Network
156082	151 Admiral Kalbfus Rd.	Newport	Level 2	2	ChargePoint Network
156103	151 Admiral Kalbfus	Newport	Level 2	2	ChargePoint Network
163612	1 W Marlborough Street	Newport	Level 2	2	ChargePoint Network
175639	151 Admiral Kalbfus Rd.	Newport	Level 2	2	ChargePoint Network

Station ID	Street Address	City	Type	No. of Connectors	EV Network
180659	1 W Marlborough Street	Newport	Level 2	2	ChargePoint Network
180660	1 W Marlborough Street	Newport	Level 2	2	ChargePoint Network
207284	31 America's Cup Ave	Newport	Level 2	2	Non-Networked
207285	25 America's Cup Ave	Newport	Level 2	2	Non-Networked
98876	20 Gate Rd	North Kingstown	Level 2	2	ChargePoint Network
52820	600 6th Street	North Providence	Level 2	2	ChargePoint Network
206616	1128 Mineral Spring Ave	North Providence	Level 2	2	Volta
86208	I-95	Pawtucket	Level 2	2	ChargePoint Network
183135	39 Central Ave	Pawtucket	Level 2	2	ChargePoint Network
183136	188 Front St	Pawtucket	Level 2	2	ChargePoint Network
189755	766 Broadway	Pawtucket	Level 2	2	ChargePoint Network
189756	766 Broadway	Pawtucket	Level 2	2	ChargePoint Network
189788	1005 Main St	Pawtucket	Level 2	2	ChargePoint Network
194546	368 Cottage St	Pawtucket	Level 2	2	Volta
52595	154 Anthony Rd	Portsmouth	Level 2	2	ChargePoint Network
169177	1 Little Harbor Landing	Portsmouth	Level 2	2	Tesla Destination
52596	51 Washington St	Providence	Level 2	2	ChargePoint Network
52597	1 Capitol HI	Providence	Level 2	2	ChargePoint Network
62333	299-331 Silver Spring St	Providence	Level 2	2	ChargePoint Network
72465	285 Edith St	Providence	Level 2	2	ChargePoint Network
85915	115-199 Park St	Providence	Level 2	2	ChargePoint Network
98877	470 Harris Ave	Providence	Level 2	2	ChargePoint Network
98880	151 Spruce St	Providence	Level 2	2	ChargePoint Network
99314	60 Dudley St	Providence	Level 2	2	ChargePoint Network
99315	101 Blackstone St	Providence	Level 2	2	ChargePoint Network
99319	175 Summit Ave	Providence	Level 2	2	ChargePoint Network
99346	32 Exchange Terrace	Providence	Level 2	2	ChargePoint Network
104482	44 Hospital Street	Providence	Level 2	2	ChargePoint Network
122819	330 Eddy St	Providence	Level 2	2	ChargePoint Network
143879	50 Park Ln	Providence	Level 2	2	ChargePoint Network
145220	301 Iron Horse Way	Providence	Level 2	2	ChargePoint Network
145454	279 Dexter St	Providence	Level 2	2	ChargePoint Network
146889	Roger Williams Zoo	Providence	Level 2	2	ChargePoint Network
146890	Roger Williams Park Zoo 1000 Elmwood Avenue	Providence	Level 2	2	ChargePoint Network
149555	222 Richmond St	Providence	Level 2	2	ChargePoint Network
149619	86 Valley St	Providence	Level 2	2	ChargePoint Network
149624	166 Valley St	Providence	Level 2	2	ChargePoint Network
153310	600 Mount Pleasant Ave	Providence	Level 2	2	ChargePoint Network
153311	600 Mt. Pleasant Ave	Providence	Level 2	2	ChargePoint Network
154243	58 Thayer St	Providence	Level 2	2	ChargePoint Network

Station ID	Street Address	City	Type	No. of Connectors	EV Network
154244	200 Dyer St	Providence	Level 2	2	ChargePoint Network
154245	1986 Lloyd Ave	Providence	Level 2	2	ChargePoint Network
154303	123 Waterman St	Providence	Level 2	2	ChargePoint Network
154415	5 Edith St	Providence	Level 2	2	ChargePoint Network
155292	347 W Fountain St	Providence	Level 2	2	ChargePoint Network
167382	45 Pleasant Valley Pkwy	Providence	Level 2	2	Blink Network
167384	280 Broad St	Providence	Level 2	2	Blink Network
167549	60 Hartford Ave	Providence	Level 2	2	Blink Network
171221	180 Friendship St	Providence	Level 2	2	ChargePoint Network
171529	1 Capitol HI	Providence	Level 2	2	ChargePoint Network
172280	115-199 Park St	Providence	Level 2	2	ChargePoint Network
174365	50 Park Ln	Providence	Level 2	2	ChargePoint Network
174432	301 Iron Horse Way	Providence	Level 2	2	ChargePoint Network
174465	279 Dexter St	Providence	Level 2	2	ChargePoint Network
174466	279 Dexter St	Providence	Level 2	2	ChargePoint Network
174722	86 Valley St	Providence	Level 2	2	ChargePoint Network
174723	86 Valley St	Providence	Level 2	2	ChargePoint Network
174724	166 Valley St	Providence	Level 2	2	ChargePoint Network
174725	166 Valley St	Providence	Level 2	2	ChargePoint Network
175108	600 Mount Pleasant Ave	Providence	Level 2	2	ChargePoint Network
175109	600 Mt Pleasant Ave	Providence	Level 2	2	ChargePoint Network
175110	600 Mt. Pleasant Ave.	Providence	Level 2	2	ChargePoint Network
175301	58 Thayer St	Providence	Level 2	2	ChargePoint Network
175302	200 Dyer St	Providence	Level 2	2	ChargePoint Network
175303	1986 Lloyd Ave	Providence	Level 2	2	ChargePoint Network
175356	5 Edith St	Providence	Level 2	2	ChargePoint Network
175357	5 Edith St	Providence	Level 2	2	ChargePoint Network
175509	347 W Fountain St	Providence	Level 2	2	ChargePoint Network
175510	347 W Fountain St	Providence	Level 2	2	ChargePoint Network
183198	705 Elmwood Ave	Providence	Level 2	2	ChargePoint Network
186548	600 Mt Pleasant Ave	Providence	Level 2	2	ChargePoint Network
186567	600 Mt Pleasant Ave	Providence	Level 2	2	ChargePoint Network
196212	180 Pine St	Providence	Level 2	2	ChargePoint Network
196213	185 Pine St	Providence	Level 2	2	ChargePoint Network
196216	125 Harborside Blvd	Providence	Level 2	2	ChargePoint Network
196217	125 Harborside Blvd	Providence	Level 2	2	ChargePoint Network
196218	100 Harborside Blvd	Providence	Level 2	2	ChargePoint Network
203362	150 Union St	Providence	Level 2	2	ChargePoint Network
203363	150 Union St	Providence	Level 2	2	ChargePoint Network
205936	110 Westminster St Parking Lot	Providence	Level 2	2	ChargePoint Network

Station ID	Street Address	City	Type	No. of Connectors	EV Network
205937	110 Westminster St Parking Lot	Providence	Level 2	2	ChargePoint Network
205951	50 Kennedy Plaza Parking Garage	Providence	Level 2	2	ChargePoint Network
205952	50 Kennedy Plaza Parking Garage	Providence	Level 2	2	ChargePoint Network
219764	1560 Westminster St	Providence	Level 2	2	ChargePoint Network
53055	371 Putnam Pike	Smithfield	Level 2	2	ChargePoint Network
98507	57 John Mowry Rd	Smithfield	Level 2	2	ChargePoint Network
52598	950 Succotash Rd	South Kingstown	Level 2	2	ChargePoint Network
102935	315 Main St	South Kingstown	Level 2	2	ChargePoint Network
173433	315 Main St	South Kingstown	Level 2	2	ChargePoint Network
154076	79 Aquidneck Dr	Tiverton	Level 2	2	ChargePoint Network
175250	79 Aquidneck Dr	Tiverton	Level 2	2	ChargePoint Network
217442	700 Metacom Ave	Warren	Level 2	2	ChargePoint Network
217443	700 Metacom Ave	Warren	Level 2	2	ChargePoint Network
217444	700 Metacom Ave	Warren	Level 2	2	ChargePoint Network
217445	700 Metacom Ave	Warren	Level 2	2	ChargePoint Network
52599	1276 Bald Hill Rd	Warwick	Level 2	2	ChargePoint Network
52824	T.F. Green Airport Connector Rd	Warwick	Level 2	2	ChargePoint Network
53466	315 Greenwich Ave	Warwick	Level 2	2	ChargePoint Network
98862	1759 Post Rd	Warwick	Level 2	2	ChargePoint Network
99402	700 Jefferson Blvd	Warwick	Level 2	2	ChargePoint Network
100335	403 East Ave	Warwick	Level 2	2	ChargePoint Network
104219	89 Jefferson Blvd	Warwick	Level 2	2	ChargePoint Network
147152	708 Greenwich Ave	Warwick	Level 2	2	ChargePoint Network
154435	560 Jefferson Blvd	Warwick	Level 2	2	ChargePoint Network
155185	334 Knight St	Warwick	Level 2	2	ChargePoint Network
166691	Rt 117 Park&Ride	Warwick	Level 2	2	ChargePoint Network
173474	89 Jefferson Blvd	Warwick	Level 2	2	ChargePoint Network
173475	89 Jefferson Blvd	Warwick	Level 2	2	ChargePoint Network
173476	89 Jefferson Blvd	Warwick	Level 2	2	ChargePoint Network
175369	560 Jefferson Blvd	Warwick	Level 2	2	ChargePoint Network
175487	334 Knight St	Warwick	Level 2	2	ChargePoint Network
181208	Rt 117 Park&Ride	Warwick	Level 2	2	ChargePoint Network
181209	Rt 117 Park&Ride	Warwick	Level 2	2	ChargePoint Network
194016	300 Jefferson Blvd	Warwick	Level 2	2	ChargePoint Network
194017	300 Jefferson Blvd	Warwick	Level 2	2	ChargePoint Network
194018	300 Jefferson Blvd	Warwick	Level 2	2	ChargePoint Network
194019	300 Jefferson Blvd	Warwick	Level 2	2	ChargePoint Network
194105	3027 W Shore Rd After City Park	Warwick	Level 2	2	ChargePoint Network

Station ID	Street Address	City	Type	No. of Connectors	EV Network
194106	3027 W Shore Rd After City Park	Warwick	Level 2	2	ChargePoint Network
194107	3027 W Shore After City Park	Warwick	Level 2	2	ChargePoint Network
197556	1557 Bald Hill Rd	Warwick	Level 2	2	ChargePoint Network
98855	52 Barnett Ln	West Greenwich	Level 2	2	ChargePoint Network
71571	525 Quaker Ln	West Warwick	Level 2	2	ChargePoint Network
165177	50 Dogwood Dr	West Warwick	Level 2	2	ChargePoint Network
180987	50 Dogwood Dr	West Warwick	Level 2	2	ChargePoint Network
98824	418 Atlantic Ave	Westerly	Level 2	2	ChargePoint Network
153232	2467 Diamond Hill Rd	Woonsocket	Level 2	2	ChargePoint Network
158469	115 Cass Ave	Woonsocket	Level 2	2	ChargePoint Network
175083	2467 Diamond Hill Rd	Woonsocket	Level 2	2	ChargePoint Network
175763	115 Cass Ave	Woonsocket	Level 2	2	ChargePoint Network
175764	115 Cass Ave	Woonsocket	Level 2	2	ChargePoint Network
115509	1 Goat Island	Newport	Level 2	3	Tesla Destination
168813	1 Goat Island	Newport	Level 2	3	Tesla Destination
115512	1 Bluff Ave	Watch Hill	Level 2	3	Tesla Destination
115513	25 Spray Rock Rd	Westerly	Level 2	3	Tesla Destination
153929	141 County Rd	Barrington	Level 2	4	SemaCharge Network
148144	302 Central Avenue	Johnston	Level 2	4	SemaCharge Network
195510	270 Central Avenue	Johnston	Level 2	4	SemaCharge Network
158615	109 Pleasant View Ave	Smithfield	Level 2	4	EV Connect
42423	1111 Taunton Ave	East Providence	Level 2	6	Non-Networked
151843	1 Providence Pl	Providence	Level 2	8	Volta
167922	1 Providence Pl	Providence	Level 2	8	Volta
115511	2000 Post Rd	Warwick	Level 2	12	Tesla Destination
98891	1960 Post Rd	Warwick	Level 2	16	Non-Networked
47804	1051 Ten Rod Rd	North Kingstown	Level 2, Level 1	30	Non-Networked
207761	1776 Post Rd	Warwick	Tesla	7	Tesla
102400	1000 Division Street	East Greenwich	Tesla	8	Tesla

Appendix D. Funding Sources